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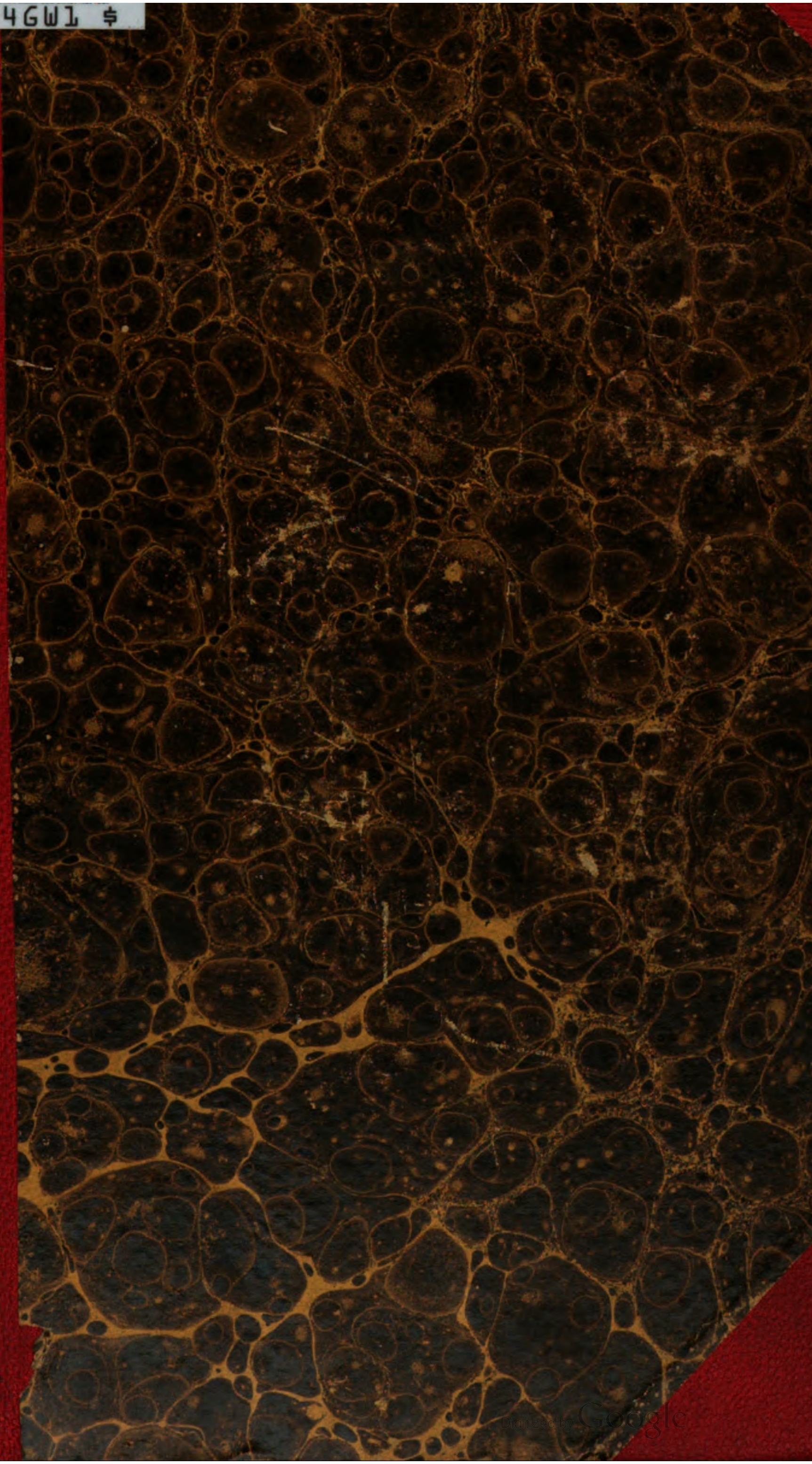

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THE
Australian Medical Journal

JANUARY 15, 1887.

Original Article.

NOTES OF A CASE OF TOTAL EXTIRPATION OF THE UTERUS BY THE VAGINA FOR CARCINOMA—RECOVERY.

By E. C. Stirling, M.A. M.D. Cantab., F.R.C.S. Eng.

Surgeon to the Adelaide Hospital, Lecturer on Physiology and on Clinical Surgery in the University of Adelaide.

[Read before the South Australian Branch of the British Medical Association, at the meeting on 26th October.]

Whether or not we are yet justified in conceding to extirpation of the uterus for carcinoma a place amongst the operations of surgery which are both established and justifiable, the conspicuous success which has attended this operation in the hands of Martin, Schröder, Billroth, and other surgeons, renders it extremely probable that it will take such a place in the near future. Indeed, there is even now no question as to the perfect feasibility of the operation, and as to the frequency with which recovery from it takes place.* That which is less well established is the question how far the operation will be found of ultimate benefit as regards the prolongation of life or the relief of suffering. On this point the data are still insufficient, I think, to enable us to form a decided opinion.

I venture to offer these notes to the Society, partly as a small contribution to the rapidly accumulating record of such cases, and partly because I think the less common operations, especially when they are difficult and dangerous, are worth recording. Further, knowing how glad I was to avail myself of the experience of other surgeons, and how much I learned from their published reports, I think it is possible that these notes, recording as they do, dangers and difficulties, mistakes as well as ultimate success, may be of some assistance to others who are seeking similar information and experience. I believe, also, I may claim that this is the first successful case, precisely of this character, that has been performed in South Australia, though I am well aware that Dr. Görger reported to this Society last year a case of recovery after removal of the uterus for fibroids, in which he combined a vaginal incision with an abdominal section.

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* Out of 253 cases collected by Dr. Gusserow (*Deutsche Chirurgie*, 1886), in which the uterus was removed by the vaginal method, there was a mortality of 23·3 per cent. This list includes many of the earliest operations, dating from 1822. In 36 cases performed after 1882, the mortality was 8·3 per cent.

M. S., aged 37, a healthy-looking woman, was admitted to the Beatrice Ward of the Adelaide Hospital, under the care of Dr. Verco, on July 16, 1886. I extract the following particulars from Dr. Verco's ward book:—

The patient complains of aching pains in the lower part of the abdomen, which have been experienced for about nine months. She is married, and has had nine children, of whom the youngest is seven months old. One miscarriage preceded the birth of the first child, and the last confinement was lingering and attended with some *post partum* hæmorrhage. Since that event there has been continuously a thin watery sanguineous discharge from the vagina.

On examination, abdomen flaccid, not prominent; some tenderness on palpation over umbilical and supra-pubic regions; vagina roomy; cervix uteri low down, large, and somewhat flattened out, fairly movable, and directed backwards; the os admits the finger point, anterior lip short, both anterior and posterior lips covered with lobular masses, which break down easily under touch, and bleed considerably; vaginal walls smooth, and free from any outgrowth or irregularity; tongue pale and flabby; gums and conjunctiva of normal aspect; bowels regular; appetite fair; pulse, urine, and temperature normal. She was ordered a diet of milk and beef tea, and a mixture containing bromide of potassium and liquid extract of ergot.

On repeating the vaginal examination a few days subsequently, the uterine sound was found to pass readily about 4½ inches in the normal direction, bleeding again recurring somewhat freely after the manipulation. On this occasion (July 23) the inner surface and lips of the cervix were scraped by Dr. Verco with a sharp spoon, and numerous soft friable masses of the growth removed, with the result of leaving the walls of the cervix bare and thin, the os then admitting two fingers. There was some little hæmorrhage attendant on the operation. A tampon of glycerine and tannic acid was introduced into the os, and a draught of liq. opii sed. ordered.

Microscopic examination of the fragments removed confirmed the obvious diagnosis of epithelioma.

Little relief to the symptoms followed this treatment, and the growth having speedily recurred, Dr. Verco asked me to see his patient, with a view to the adoption of some more radical procedure. I accordingly did so, and found substantially the same condition of things as described on her admission, with a similar tendency to hæmorrhage on manipulation.

In view of the fact that the disease was apparently entirely confined to the cervix and internal surface of the uterus, and that the organ was not unduly enlarged, and fairly movable, it appeared to me a very proper case for the removal of the uterus by the vagina, and, my surgical colleagues concurring in that opinion, the patient consented without hesitation to undergo the operation, of which the risks were unreservedly represented to her.

As I had not before undertaken this operation on the living body, I postponed the performance of it on Mrs. S. until I should have had some opportunities of doing it a few times upon the cadaver, a course which was of the utmost advantage to me.

Eventually the operation was fixed for September 11, at 9 a.m., the patient having been previously removed to the Ovariotomy Cottage. All the usual preliminaries were carried out—that is to say, the bowels were cleared by a purge administered on the two consecutive nights preceding the day of operation, and an enema early on the morning of that day. The vagina and vulva were well cleansed by washing with carbolised lotion from the douche, both the night before and on the morning of the operation. The pubes were shaved, and the urine drawn off shortly before our visit.

Ether having been administered in an adjoining room, I operated with the assistance of my surgical colleagues—Drs. Gardner, Görger, Jay, and Giles, Dr. Verco also being present. All the usual antiseptic precautions, except the spray, were adopted.

The patient being secured in the lithotomy position, and the vagina once more washed out and held widely open by broad flat spatulæ, a male sound was held in the bladder; the uterus was well drawn down with a vulsellum forceps, and the cervix transfixed with a thick double silk ligature well behind the limits of the growth. Anterior and posterior incisions were made, similarly well clear of the disease, through the tissues covering the cervix, and through these incisions the tissues were separated before and behind from the substance of the uterus by means of a scalpel handle, blunt pointed scissors curved on the flat, and by the fingers. This was done easily enough on the posterior surface, but in front it was a matter of considerable difficulty, owing to the extreme adherence of the uterus to the bladder, due, it appeared even then to me, to the close encroachment of the disease towards that surface. The greatest care, therefore, had to be taken to keep close to the uterus, so as to avoid wounding the bladder. The peritoneum in front and behind was then opened by transverse incisions, and, with a little more separation of the parts by the fingers, the uterus was apparently freed from its attachment, save to the broad ligaments on each side. I then felt sure that the fundus could be sufficiently tilted forwards to be dragged outwards through the vagina, but owing to the length of the organ and the shortness of my own fingers, I was unable to reach up far enough to effect this manœuvre. Thanks, however, to the long and dexterous fingers of Dr. Gardner, inserted behind the organ so as to tilt it forwards, combined with the assistance of a Barnes' sheathed polypus hook inserted into the front of the fundus, the body of the uterus was forcibly anteverted and dragged forwards and outwards through the vagina; thus I was enabled to pass a second stout double ligature through the fundus, which gave a sure and excellent control over the organ for the remainder of the operation.

By this manœuvre I should have been enabled to draw down the uterus sufficiently far to place ligatures on the broad ligaments, but there was considerable difficulty in doing this, for the reason that in the first incisions encircling the cervix, I was not sufficiently careful to join the anterior and posterior incisions on the right side, and the band of mucous membrane thus left incompletely divided was the hindrance. Remedying this oversight as well as I could, I was eventually able to draw down the uterus sufficiently far to get hold of the whole broad ligament of the left side. Transfixing it, I tied it, without including the ovary, with strong carbolised Chinese silk (which material was used throughout the operation), first in two halves, and then again as a whole, leaving the ends of the ligatures long. I then cut through the ligaments between the ligature and the uterus, and for additional security I tied separately one conspicuous vessel in the severed stump of the now ligatured broad ligament.

I was then free to deal with the right side, but here I encountered this additional difficulty, viz., that in drawing down the uterus, part of the organ broke away under the tension, and left a portion of the diseased structure attached to the broad ligament. Applying a ligature temporarily, I freed and removed the whole of the uterus, except that fragment of diseased tissue which, as before said, remained attached to the broad ligament. With some difficulty I was able to draw down this fragment sufficiently to transfix and ligature the broad ligament as on the left side, well above the diseased part, which was then removed. In this case, however, the ovary was included in the parts removed. Further trouble here awaited me, for, on completion of the section, one of the ligatures placed on the stump slipped, allowing a large vessel, probably the right uterine artery, to bleed profusely. This was speedily secured and tied, but there was still considerable hæmorrhage, which came apparently from a number of small vessels so far up in the remotest recesses of the large cavity now left that there was the greatest difficulty in arresting it. Forceps after forceps were applied, and at last, after the application of eight, the bleeding seemed to be checked. Here I will say that much of my difficulty would have been removed if I had possessed artery forceps much larger and stronger than those in ordinary use, which, by their shortness, were quite inadequate for working in a cavity of such depth. To lessen further the risks of hæmorrhage, several well carbolized sponges, with strings attached, were jammed up against the surface whence the bleeding proceeded. The vagina was then washed out with the douche; a T-shaped rubber drainage tube of large calibre inserted as far up as possible, with the cross piece lying transversely across the upper part of the cavity, between the tied ends of the broad ligaments; some plugs of carbolized gauze well powdered with iodoform, and attached by strings inserted into the vagina, and a large pad of a similar character, supported by a T bandage, placed over the outside of the vulva, through the orifice of which the handles of the artery forceps, as well as the drainage tube, and various ligatures just protruded. No attempt, it will be observed, was made to suture the cut edges of the peritoneum. The whole operation lasted a little over two hours, and on its completion the patient was much blanched, with a pulse scarcely perceptible, but, on the subcutaneous injection of ether, the circulation revived perceptibly, and she was shortly moved into her bed.

For the subsequent course of the case I will, as briefly as possible, summarise the notes of the case, taken by the House Surgeon, Dr. Aitken.

Recovery soon took place from the effects of the anæsthetic, and was followed by considerable sickness, which appeared intensified by the small quantities of brandy which were ordered to be given as soon as she should be able to swallow; champagne was therefore substituted with some benefit, but for three or four hours the pulse remained exceedingly weak, and she complained much of severe pain in the back. One-sixth of a grain of morphia was injected subcutaneously. At 3 p.m. the pulse had much improved, being 104 and soft, and the pain in the back was less. Between 3 and 7.30 p.m. she slept a little, but the pain becoming more severe, the morphia injection was repeated. At 10.30 p.m. the pulse was 120, and the patient was retching a good deal; at midnight the injection was repeated, and the external pad, through which some oozing appeared, was changed. During the remainder of the night she slept a little at intervals, and was, on the whole, reasonably comfortable, taking frequently small quantities of champagne, milk, and chicken broth.

Sept. 12.—On the following morning two of the sponges and all the eight artery clips were removed, no fresh hæmorrhage following. The vagina was well irrigated with 1-10th per cent. warm solution of thymol, and then plugged with tampons made of salicylic wool, well dusted with iodoform, enclosed in small bags of carbolized gauze, each bag being secured by a string for its easy removal. Temp., 99.6°; pulse, 120; tongue, clean and moist. She slept about two hours during the course of the day, and did not suffer much pain; in the afternoon the remaining sponges were removed, some dark red bloody discharge following, quite free from any putrefactive smell. The labia were slightly swollen. The vagina was again irrigated with the thymol solution from the douche, and the iodoform tampons, as well as the external dressings, changed. During the evening she slept frequently at intervals, and was fairly comfortable. Respirations 20, pulse 134.

Sept. 13. — In the early morning she was very restless, complaining of great pain in the bowels, and vomiting frequently. Pulse 136, temp. 98·6°. Morphia injections were continued at intervals, with the result that both pain and sickness gradually ceased. Dressed as before both in the morning and afternoon, and ordered some jelly in addition to the milk and beef tea.

Sept. 14.—Vomiting has ceased since the previous evening, but she complains of heartburn, for which a little bicarbonate of potassium was ordered. Dressed as before in the morning and afternoon. Pulse varying from 120–130, and temp. from 101·4–102·2° during the day.

Sept. 15.—Is feeling restless and uncomfortable from flatulence and a severe pain in the epigastrium, for which she was ordered a mixture of sal volatile, sp. chloroformi, and tinct. cardamom co. in peppermint water, to be taken occasionally.

Sept. 16.—Slept well during the night, and is much refreshed in consequence. The pain and flatulence have also much diminished. For the first time there is the slightest possible abdominal tenderness. Pulse 120, temp. 101·2°. From now onwards irrigated, and dressings changed three times in the twenty-four hours, in place of twice as heretofore. Discharge slight, but increasing in quantity, barely blood-stained and quite sweet. The abdominal pain ceased towards evening, and the patient was comfortable.

Sept. 17.—The T-shaped drainage tube was withdrawn and replaced by a straight piece of similar material.

From this date the favourable progress of the case renders it unnecessary that I should continue in detail the daily record. I will, therefore, sum up the subsequent course of events by saying in general terms that the progress towards recovery was uninterrupted, save for some slight digestive disturbances. The discharge, at first scanty and sero-sanguinolent, increased till it became copious and purulent, but with never more than a slight odour of putrefaction. As the discharge increased, so was increased the frequency of the dressing and douching, and conversely. For many days this performance caused the patient much distress from the severe scalding pain arising from extreme tenderness and excoriation of the labia, both internally and externally, but this pain ceased almost immediately on completion of the dressing, and, after its cessation, she invariably expressed herself much more comfortable than before. The application of vaseline, both before and after the douching, was found to give great relief in respect of this pain.

The same kind of tampons and external pads were used throughout, the strings allowing the former to be easily withdrawn and changed.

The bowels were opened naturally on the seventh day after the operation without pain or trouble, and she was allowed some fish as a commencement of a solid diet on the following day. Subsequently, the bowels were opened occasionally by the administration of a simple enema, and later by an occasional dose of Carlsbad salts.

The use of the catheter, until then regulary used, was discontinued on the thirteenth day, the urine being thenceforward passed naturally, without pain or difficulty, and being in all respects normal in character. On September 24, thirteen days after the operation, the ligatures on the left side all came away together on slight traction being made, a small slough being attached. On October 1, all the ligatures on the right side, as we thought, were similarly removed, except one, which came away three days later. She was then allowed to get up, and on the 6th October, she was able to walk a little, feeling as her chief trouble, the weakness of her ankles.

On the 9th October, she returned to the general ward, the discharge having almost ceased, and the vagina being washed out once a day only, and on the 13th, having regained her strength to a considerable degree, she was sent to the Convalescent Hospital at the seaside, where she is instructed to remain a month, and then return here to report herself.

The following is a brief account of the condition of the parts removed :—

Greatest length of uterus, four inches; breadth at fundus, three inches; thickness of walls, about three-quarters of an inch. Os tumid, ragged, eroded and friable; canal of cervix obliterated. The disease had encroached on the anterior wall for only an inch from the os. There was no evidence externally of the extension of the disease towards the posterior surface, but a section through the organ showed that there was some infiltration of the tissues in that direction also. Internally, the mucous membrane was blood-stained and apparently affected by the disease throughout the lower two-thirds. On microscopic examination, a section through a piece of the eroded border, showed a structure consisting chiefly of closely aggregated small round cells, with a small and varying amount of stroma. Here and there, throughout the muscular substance, were groups of cells of a distinctly epithelial type, and a few typical epithelial nests were also observed.

These appearances sufficiently indicated the character of the growth as epithelioma.

Remarks.—With a very limited experience of this operation, I am doubtful of the value of any observations I may make, and if I venture to offer them, it is only to those who, like myself, are seeking information and experience.

In the first place the operation is one of great difficulty, and should never be undertaken for the first time without repeated practice on the dead body, and careful study of a dissection of the region involved. By the assistance and courtesy of the Professor of Anatomy, Dr. Watson, I had every advantage in these respects, and I found the information and experience thus gained, simply invaluable.

The chief dangers, of course, arise from the risk of wounding either the bladder in separating the anterior surface of the uterus from this organ, the ureters, to which one comes perilously near in tying or dividing the broad ligaments, or the rectum and intestines, one or both of which may come awkwardly in the way. The difficulties arise primarily from the fact that one has to steer clear of all these risks whilst working at the bottom of a deep and narrow cavity, with the view often obscured by blood. In my case, the separation of the uterus from the bladder required especial care, as these organs were more than usually adherent, and I consider myself fortunate in having avoided this material complication. The rectum came well into view, and bulged forwards somewhat, but it never became a source of trouble, being very easily pressed back out of the way. I had no trouble from prolapsing of the intestines, but I notice that this occurrence caused much inconvenience in some of the reported cases.

As to the relative advantages of the two methods of securing the broad ligaments, namely, that of carrying a ligature round them *in situ*, or that which I adopted—of anteverting the uterus, and bringing its fundus out by the vagina, I hesitate to speak, but I incline to the latter as giving the best facility for applying the ligature. If, however, the uterus is long and the vagina narrow, it is not at all an easy manœuvre to perform, but the operation is materially facilitated by the use of Barnes's sheathed hook, as described above. So far as my experience on the cadaver goes, the upper edge of the broad ligaments lies at a very variable distance in different subjects. In cases in which this was not great, no considerable difficulty was experienced in hooking a ligature round them, and by this means, in bringing them sufficiently within reach, to transfix and tie with safety and security. On the other hand, in those cases where the edge is situated far up, it is very difficult, not only to pass the ligature, but also to be certain that the whole of it, and nothing more than the whole, is enclosed.

Schröder, of Berlin, recommends *retroverting* the uterus, and so bringing out the fundus through the posterior *cul de sac*, but this appears to me more difficult still than the plan of anteversion which I adopted.

Another source of obvious trouble that is noticed by most operators, and which I have recently seen exemplified to a considerable degree in a case of Dr. Way's, is the liability of the diseased and softened tissues to break away under even a very moderate strain when pulled upon by the vulsellum or ligature. This, of course, can scarcely be wholly obviated in some cases where there is extensive disease, but the liability to the accident is obviously lessened by using only a very broad bladed vulsellum and thick ligatures for holding purposes, and by applying these to healthy tissues, or at least, to tissues as far as possible from the diseased structures. I was, on the whole, fortunate in this respect.

I have already remarked upon the hæmorrhage in my case which threatened to be dangerous. This was in great part due to my initial fault of not having thoroughly divided the mucous membrane around the cervix, and so allowing the uterus, with its attachments, to be more freely drawn down within reach, but even under the circumstances the trouble would have been more easily obviated if I had possessed longer and stronger artery clips.

The treatment adopted requires little further notice. The main point, of course, being thorough drainage, and the prevention, as far as possible, of putrefactive changes, by frequent douching with antiseptic lotions, and by the presence of antiseptic tampons. For drainage, the T-shaped rubber drainage tube, made in a very simple manner by sewing the end of one piece to the edges of a hole of corresponding size in the middle of another, answered very effectually, the tube being large enough to allow of the insertion in it of the nozzle of the irrigator. The lotion used for irrigating was one-tenth per cent. solution of thymol, which has been that adopted in many of the recorded cases. In my own case I had every reason to be satisfied with it, for at no time was there more than a very slight putrefactive odour. Indeed, considering the locality, it would seem impossible to avoid this entirely.

I have no experience of Mikulicz's permanent irrigator, which is used by some surgeons, but it appears to me, from the accounts of those who use it, that however efficient it may be for drainage purposes, it is attended with several inconveniences, notably those of discomfort to the patient.

The tampons of salicylic wool, impregnated with iodoform, were used throughout, and seemed to answer their purpose admirably as an antiseptic.

In connection with the question of drainage, I must allude to a suggestion of Dr. Gardner, that the sitting posture is obviously calculated to promote drainage from the vagina, and, adopting that suggestion so soon as my patient was strong enough, she was propped up into a sitting posture occasionally during the day.

To avoid undue intrusion of details but little mention has been made in the report of the case of the temperature; this, however, was taken at first every three hours, and subsequently every six hours; the highest recorded temperature being 102·6° at 3 p.m. on the 16th Sept. Though never very high, the temperature remained a considerable time above the normal, and was thus a constant reminder not to neglect frequent irrigation and dressing.

During the first few days after the operation the diet consisted of beef tea, chicken broth, and subsequently calves-foot jelly, with small quantities of champagne, and a liberal supply of ice, which was always very grateful. To this was added, as stated, some fish after the first action of the bowels, and gradually a solid diet of a light character was resumed, to which was added a little port wine. I may here mention that the patient stated that she had been all her life very abstemious. The only medicine given, besides those reported, was quinine during convalescence.

Mrs. S. is to return here after her stay at the Convalescent Hospital, and my only anxiety is that, as has so often happened in these cases, all our efforts may prove futile from a too speedy recurrence of the disease.

I am well aware that in the above remarks I have left quite untouched many important questions, notably that of the indications for or against the operation, but I feel I have already trespassed too long upon the time of the Society. At some future time I hope to bring the whole question before it for discussion.

In conclusion, I have to thank my colleagues, especially Dr. Gardner, for their invaluable assistance during the operation, as also the House Surgeon, Dr. Aitken, for his cheerful and unvarying attention to the case at all times and seasons.

Note.—On the return of Mrs. S. to the Hospital, on the 14th November, after her sojourn at the Convalescent Home, I had an opportunity of examining her with Dr. Verco.

She had improved very considerably as regards her strength and general health, being, as she said, better than she had been for many months. There was scarcely any discharge.

On vaginal examination, the central parts of the divided peritoneum were well and firmly healed, but on each side, at points corresponding to the position of the stumps of the broad ligaments, there was a patch of rather dark, exuberant, and not very healthy-looking granulations. To that in the right side was attached a linear brownish-looking mass of what appeared exactly like fæces, but on seizing it with a forceps it came away completely and easily, and proved to be a ligature enveloped in old blood clot.

The patient was sent home, with instructions to return for inspection in a month.

Medical Society of Victoria.

Annual Meeting.

Wednesday, January 12th, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. Allen, Jamieson, Jonasson, Jackson, Le Fevre, J. P. Ryan, C. S. Ryan, W. Moore, A. J. Wood, Hope, Joyce, Springthorpe, Neild, A. A. Fletcher, Wilkinson, Clendinnen, Kenny, Iredell, Haig, Girdlestone, Brett, J. S. Nickoll, Alsop, Annand, Bennie, Webb, Bage, Balls-Headley, Davenport, Fyffe, J. A. Robertson, Bowen, F. W. W. Morton, Tweeddale, W. Barker, A. S. Gray, Joske, Meyer, and Syme.

The President, Dr. Jamieson, occupied the chair.

Dr. Hull was present as a visitor.

The minutes of the preceding ordinary and special meetings were read and confirmed.

The HON. SECRETARY reported that several members had withdrawn their names from candidature for various offices; also, that the following gentlemen had tendered their resignations of membership of the Society. Dr. A. Colquhoun, Dr. Fulton, Dr. Jakins, Dr. Singleton, and that the resignations had been accepted by the Committee.

The HON. SECRETARY also submitted, for the inspection of members, a sample of the Immisch thermometer, and drew attention to a large exhibit of Messrs. Burroughs and Wellcome's pharmaceutical preparations.

NEW MEMBERS.

Dr. Charles Galdwyn Shuter, M.B. Durham, M.R.C.S. Eng., of Kensington, was elected an ordinary member of the Society, being proposed by Dr. C. S. Ryan, and seconded by Professor Allen; Professor Thomas Peter Anderson Stuart, M.D. Ch. M. Edin., of the University of Sydney, was elected an honorary member, on the motion of the President, seconded by Professor Allen. Four gentlemen were nominated for election at the next monthly meeting.

ANNUAL REPORT OF THE COMMITTEE.

The HON. SECRETARY then read the Annual Report of the Committee as follows:—

The Committee can congratulate the Society on a year of decided progress. The roll of members has undergone a marked increase. The meetings have been well attended; the papers read before the Society have been unusually numerous, and in several instances have provoked prolonged and valuable discussions. The pathological exhibits, as in former years, have been abundant and have added materially to the attractiveness of the meetings.

During the year, twenty-eight ordinary members and one honorary member have been added to the Society, in addition to three ordinary members who were elected at the last Annual Meeting. Four members died during the year, namely, Dr. Motherwell, Mr. Paley, Dr. R. H. Sparrow and Dr. Wyer. Seven members have resigned their connection with the Society. The total number of members now upon the Roll is 205, of whom 11 are life members, 174 ordinary members, 10 corresponding members, and 10 honorary members.

Twelve ordinary and two special meetings of the Society have been held during the year.

Papers have been read as follows :—

By Mr. Girdlestone, on "Two Cases of Fracture of the Skull."

By Dr. Neild, on "A Case of Obstruction of the Bowels, treated by Paracentesis Ceci."

By Dr. Springthorpe, "Notes on twenty-one Cases of Epilepsy."

By Dr. Cleaver Woods, on "A Case of Large Abdominal Tumour in a Child—Operation—Recovery."

By Professor Allen, "Notes on a Sarcoma containing Striated Muscular Fibres."

By Dr. Iredell, on "Nervous Deafness."

By Dr. Elsner, on "Baths and Antipyrin in Typhoid."

By Dr. C. S. Ryan, "Notes of a Case of Strangulated Hernia."

By Dr. Springthorpe, on "Bilirubin in a Hydatid Cyst."

By Dr. Jamieson, on "Cases of Multiple Neuritis."

By Dr. Fred. Bird, "Notes of a Case of Primary Syphilis Simulating Lupus."

By Dr. J. W. D. Hooper, "Notes on a Case of Incomplete Rupture of the Uterus."

By Dr. Balls-Headley, on "A Series of Cases of Imperfect Development of the Female Organs of Generation."

By Dr. J. P. Ryan, on "A Case of Injury to the Spine—Crossed Sensation."

By Mr. T. N. FitzGerald, "Notes on a New Operation for Hypospadias."

By Dr. S. Dougan Bird, "On some Phases in the History of the Treatment of Pulmonary Phthisis, during the last twenty-five years."

By Dr. W. Moore, on "Two Cases of Acute Yellow Atrophy of the Liver."

By Dr. James Robertson, on the question, "Is Phthisis Pulmonalis Contagious."

By Dr. Balls-Headley, on "Seven Cases of Laparotomy."

By Mr. Girdlestone, on "Lupus Exedens—Rhinoplastic Operation."

By Mr. Girdlestone, on "Compound Fracture of the Leg; Amputation at the Knee Joint, followed by Septic Fever—Recovery."

Pathological exhibits have been submitted by Professor Allen, Dr. J. Williams, Dr. Cleaver Woods, Dr. Bowen, Dr. Springthorpe, Dr. J. W. D. Hooper, Dr. Cox, Dr. Gardner, and Dr. Balls-Headley. Patients under treatment have been brought before the Society by Mr. Girdlestone, Dr. C. S. Ryan, and Dr. Peipers. Photographs and charts of temperature have been exhibited by Mr. Girdlestone, and Dr. Balls-Headley. A new Register of Vaccinations, devised by Dr. Penfold, was exhibited by Dr. Le Fevre. Collections of novel instruments were exhibited by Messrs. Mayer, Meltzer and Jackson.

At the Annual Meeting in January 1886, Dr. Moloney, who then retired from the office of President, was empowered to represent the Society at all meetings of kindred associations during his visit to Europe.

At the first sitting of the Committee after the Annual Meeting of the Society, Dr. Jamieson was unanimously re-elected editor of the *Australian Medical Journal*, and Dr. Fred Bird and Dr. W. Moore were elected Departmental Editors. The Journal has appeared throughout the year with commendable regularity, and has been conducted in a manner most satisfactory to the Committee, and doubtless to the whole Society. The Committee recommends that a special vote of thanks be accorded to Dr. Jamieson, for his excellent services as Editor-in-Chief.

At the instance of Dr. Neild, the Society recorded its regret at the decease of Dr. W. B. Carpenter.

At the Meeting of the Society in March, Dr. Tweeddale drew attention to the unsatisfactory rate of remuneration which the Government proposed to allow to Medical Practitioners for examining factory employés and reporting upon their physical fitness for such work. The Society decided that the fee was inadequate, and advised the Central Board of Health accordingly.

At the end of May, the Committee wrote to the Medical Board of Victoria, urging that copies of the proposed Bill to amend the Medical Practitioners' Statute should be printed, and that advance copies should be sent to the Committee. Copies were received in June from the President of the Board, with a request for an immediate expression of the views of the Committee concerning the proposed legislation. The Committee, after carefully considering the measure, suggested several amendments, which, if adopted, would materially aid in protecting the public from charlatanry, in conserving the rights of registered Medical Practitioners, and in raising the minimum standard of medical education which could be accepted by the Board.

An important event in the history of the year was the passing into law of the new Imperial Medical Act, which provides that graduates of Colonial Universities, approved by the General Medical Council, may be registered in a separate section of the British Medical Register. In this connexion, the Committee can congratulate the Society and the profession upon the great improvement which has been effected during the past year in the course of study and examination for Medical Degrees in the University of Melbourne.

The attention of the Committee has been repeatedly directed to the evils arising from the operations of unqualified practitioners, and to the improper conduct of some registered medical men, who associate themselves with unqualified persons either in ordinary practice or in the conduct of medical charities. The greatest evil arises from the readiness with which some practitioners furnish death certificates, thereby enabling quacks to batten on the public with impunity. Various other ethical matters have been dealt with by the Committee, such as the improper advertisements of certain medical men. Unfortunately, though in a very few instances, members of this Society had erred in this way; but it may be hoped that the decided action taken by the Committee and by the Society will repress a tendency which, if unchecked, would go far to destroy the foundations of professional decency.

A friendly correspondence has been conducted with the Pharmacy Board, which resulted in the Society receiving satisfactory assurance from the Board of its intention to suppress irregular practice by registered Chemists. Practical examples of this intention have not been wanting, though, unfortunately, the penalties inflicted upon offenders have been too lenient.

During the past year the Committee revised the Scale of Fees for Medical Services; the revised scale, after further amendment, was adopted by the Society. It was published in the August number of the *Australian Medical Journal*, and was also printed separately, a copy being sent to every member of the Society. Numerous applications for copies have been received from practitioners in this and other Colonies, a fact which attests in a gratifying manner the usefulness of the scale.

In compliance with a suggestion from the Pharmaceutical Society, it was resolved "That the members of the Medical Society of Victoria formally agree to adopt the new Pharmacopœia as a guide in prescribing."

The Committee has already drawn the attention of the Society to the Medical Congress which will be held in Adelaide during the present year. It is hoped that a large number of members will attend the meetings of the Congress and contribute to its proceedings.

Hitherto the Society has taken no active part in the movement to initiate an Australasian Association for the advancement of Science; but the Committee suggests that Professor Anderson Stuart, of the University of Sydney, who has just been elected an Honorary Member of this Society, be invited to act as our representative in connexion with the proposed Association.

During the year a question was discussed involving the order of business at the meetings of the Society. Dr. Couper Johnston, with many other members, desired that pathological specimens should be exhibited at an early hour; but it was decided that, when original papers remain for consideration, specimens shall not be submitted before 9 o'clock.

The proposal to increase the Annual Subscription of town members will come before the Society this evening; the Committee repeatedly postponed the question so that it might be dealt with by as full a meeting as possible. The object is to secure funds for the development of the Library, so that all new books of any value may be placed at once upon the shelves. There can be no doubt that such an extension of the Library would greatly add to the usefulness of the Society; but the Committee does not wish that the change should be made without the general and hearty concurrence of members.

The Committee has considered Dr. Fyffe's proposal that a new rule should be adopted, prescribing a period of residence in the Colony prior to election of new members, or in some other way providing a guarantee of the eligibility of those nominated for election. The Committee, however, is not prepared to recommend any action in the direction suggested.

Fourteen meetings of Committee have been held during the year. The attendance of members has been as follows: Dr. Jamieson 13, Dr. J. Williams 8, Dr. J. P. Ryan 9, Dr. Bowen 4, Dr. Webb 14, Professor Allen 14, Dr. Neild 11, Dr. Jonasson 10, Mr. Girdlestone 12, Dr. Jackson 11, Dr. C. S. Ryan 8, Mr. T. N. FitzGerald 0, Dr. Fred Bird 1, Dr. W. Moore 11, Dr. Graham 5, Dr. Cutts 1.

The Report of the Committee was adopted on the motion of Dr. Haig, seconded by Dr. Annand.

Professor Allen proposed, and Dr. Neild seconded a motion, "That a hearty vote of thanks be accorded to Dr. Jamieson, for his services as Editor of the *Australian Medical Journal.*" The motion was carried by acclamation, and was briefly acknowledged by Dr. Jamieson.

It was resolved on the motion of Professor Allen, seconded by Dr. Bowen, that Professor Anderson Stuart be requested to act as representative of the Society in connexion with the Australasian Association for the advancement of Science.

REPORT OF THE HON. TREASURER.

The Hon. Treasurer, Dr. Bowen, then read the following Annual Report :—

The Treasurer in account with the Medical Society of Victoria, for the year ending 31*st December*, 1886.

Dr.	£	s.	d.
To Balance from 1885	97	11	7
„ Subscriptions	122	14	0
„ Entrance Fees	23	2	0
	£243	7	7

Cr.	£	s.	d.
By Interest on Debentures	20	7	0
„ Cheque not presented 1885	1	7	0
„ Mr. Cackett, Caretaker	10	8	0
„ Subscription returned	1	1	0
„ Hon. Secretary, Sundries	2	7	6
„ Detmold, for Binding	8	7	0
„ Stillwell, for Printing, &c.	54	14	6
„ Rates	6	0	0
„ Gas	7	3	11
„ Altering Window, &c.	3	16	3
„ Robertson	9	8	3
„ Morris, for Repairs	4	6	9
„ Mayer and Meltzer, for Freight	3	12	6
„ Francis	0	15	0
„ Sundries	1	1	0
Balance	108	11	11
	£243	7	7

Audited and found correct.

Thos. Aubrey Bowen,
Treasurer.
January, 1887.

Wm. Barker,
P. B. Bennie, } *Auditors.*

Debentures Still Owing.

MEMBERS.

Dr. Cutts	15	Dr. Gray	5
„ Headley	10	„ McMillan	5
„ Lawrence	10	„ James	4
„ McGillivray	10	„ Rudall	2
„ Barrett	5	„ Ryan	2
„ Bowen	5	„ Barker	2
„ FitzGerald	5	„ Ford	2
„ Embling	5	„ Le Fevre	1
„ Fletcher	5		
„ Girdlestone	5		103
„ Graham	5		

NON-MEMBERS.

Dr. Wilkie (the late)	5	Dr. Fulton	4
„ Day (the late)	5	„ Whitcomb	5
„ Blair	5	Medical Benevolent Society ..	12
„ Paley (the late)	5		
„ P. Smith	2		47
„ W. Thomas	4		

Equal to £45 per annum.

Debentures Returned to Society.

Dr. F. D. Bird „ S. D. Bird „ Webb „ Burke „ Hewlett „ Neild „ FitzGerald „ Bowen „ Fetherston „ Moloney	Life Members 5 Debentures each.	Dr. Gillbee (purchased) .. „ Molloy .. .. .. „ Ralph .. .. .. „ Bowan	4 2 1 2

Total 61.

Gentlemen,—I think we may again congratulate ourselves on the satisfactory financial position of the Society as shown in the balance sheet. The arrears of subscriptions are rather numerous, but I hope that within a short period they will all be paid up.

In addition to the balance as shown, there are subscriptions amounting to between £70 and £80 still owing for the past year, but against this, about £20 is due for interest on Debentures.

The Debentures for the hall will fall due in another year, and I anticipate there will be no difficulty in renewing such as have not been presented to the Society, or converted into a Life Membership.

The Hon. Treasurer's Report was unanimously adopted on the motion of Dr. Jonasson, seconded by Dr Le Fevre.

REPORT OF THE HON. LIBRARIAN.

The HON. LIBRARIAN, Dr. Webb, presented the following report:—

GENTLEMEN,—The progress we have been able to make with our Library during the past twelve months, though not so great as might have been wished, has on the whole been fairly satisfactory. We have been able to add a good many older works, have completed sets of some journals, and have put ourselves in correspondence with Secretaries of Societies and other sources from which valuable donations may be received.

In 1885, I was able to make many additions by visiting the private libraries of the doctors residing in the neighbourhood of Melbourne, and collecting such of their books as they did not require themselves; but this recruiting ground is exhausted, and if the Society desires to possess a library worthy of the name, some effort will have to be made to raise monies from other sources than voluntary subscriptions.

I have much pleasure in acknowledging donations, and presents of books from the following gentlemen:—Dr. Brett, Dr. Le Fevre, Dr. Wigg, Dr. Ralph, Dr. Couper Johnston, Dr. Neild, Dr. Peel, Dr. Turner, Dr. Jakins, Dr. Snowball, Dr. Iffla, Dr. McInerney, Baron von Mueller, Dr. Jamieson, Dr. Ashburton Thompson, Dr. Allen, Mr. Hayter (Government Statist), Committee of Hobart Hospital, Executors of the late Dr. Motherwell.

The Report of the Hon. Librarian was adopted, and a special vote of thanks was accorded to Dr. Webb for his eminent services to the Society, on the motion of Professor Allen, seconded by Dr. Jackson.

ELECTION OF OFFICE-BEARERS FOR 1887.

The following Office-bearers of the Society were elected for the year 1887:—

PRESIDENT—Dr. J. Williams.

VICE-PRESIDENTS—Dr. J. P. Ryan and Dr. Balls-Headley.

HON. TREASURER—Dr. Bowen.

HON. SECRETARY—Professor Allen.

HON. LIBRARIAN—Dr. Webb.

COMMITTEE — Mr. Girdlestone, Dr. Jackson, Dr. Jamieson, Dr. Jonasson, Dr. Neild, Dr. C. S. Ryan.

AUDITORS—Dr. Barker and Dr. Bennie.

Dr. Annand and Dr. Hope acted as Scrutineers of the ballot.

The retiring President, Dr. Jamieson, then vacated the chair, which was taken by the Senior Vice-President, Dr. J. P. Ryan.

The Hon. Secretary announced that he had received a telegram from the newly-elected President, Dr. Williams, who was in Tasmania, apologising for his absence from the meeting.

The Chairman then called upon Dr. Jamieson to deliver the Annual Address.

PRESIDENT'S ADDRESS.

Gentlemen,—The time has come for me to divest myself of the office, which by the favour of the Society I entered on a year ago. Happily I can say, both for myself and for the encouragement of my successor, that there is honour as well as responsibility attaching to it, and that the responsibility is lightened by the support given by the Committee, and the unfailing help of the Honorary Secretary. With such a helper as I have found Professor Allen to be, the duties of the President can hardly be very onerous, and the man who is called upon to fill the chair at the Society's meetings, may depend on receiving such courteous support as will make the performance of his duties a pleasure.

I am happy in being able to congratulate the Society at the end of a successful year's work. The meetings have been regularly held, and on every occasion there was a satisfactory, and very often a large attendance. There has always been a large amount of business on the notice paper, and indeed it almost looks as if it would soon be necessary to read some of the longer communications in abstract, so as to prevent an absolute block. In the report of the Committee, there is given a list of the papers read at the ordinary meetings, and it is therefore unnecessary for me to repeat what is there said. But it is only fair to say that we have had many papers of a very high character, the scientific and the practical sides of professional work being both well represented.

The plethora of written communications has had rather the effect of keeping in the background the demonstration of pathological specimens, which many members feel to be not the least interesting and useful part of our proceedings. If the supply of papers continues to be equally large, it may be desirable for the Committee to make arrangements, whereby interference with interesting exhibits shall not be permitted to too great an extent.

Though I do not propose to refer in detail to the papers read at our ordinary meetings, it may be proper to say a few words about one subject, which occupied our attention for the greater part of two evenings. In two papers, by Dr. S. D. Bird, and Dr. James Robertson, we had an exposition of the present state of knowledge and opinion, on the great questions of the etiology and treatment of phthisis. Great questions they are in almost all civilised countries, and their importance among ourselves is becoming more and more recognised. The discussion which followed the reading of the papers, was both full and interesting, and was a credit to the Society, though I think it might have been of even greater value, if there had been something more in the way of previous arrangement and preparation. The importance of the discussion, independently altogether of the value of the contributions themselves, consisted also in the fact, that it was the first serious attempt to do what has often been spoken of as a desirable thing. It has been felt that the meetings would be more attractive and useful to the general body of the members, men in busy practice, if there were occasional evenings given to the discussion of subjects, carefully selected by the Committee and announced beforehand, so as to allow of proper preparation. It might be desirable to draw up a short statement of views to be presented, and an abstract might even be printed and circulated, some time before the meeting at which the discussion was to take place. In that way, members would have help in preparing any remarks they might think fit to make. The effect would probably be that some, who will not undertake to prepare papers, and the results of whose reading and experience are now kept almost solely for their private use, might thus be induced to take a more active share in our regular work. With sufficient warning too, and the matter under discussion being suitable, further value might be given to it by the exhibition of pathological specimens, drawings, and other illustrations, and even cases showing special symptoms or stages of a disease. I venture to make a suggestion to the new President and Committee, that this matter might well be considered by them at one of their early meetings, that plans may be elaborated without delay.

The losses which we have sustained by death during the year have not been very numerous. I have been able to find only four among those whose names stood on our roll of members. No one of them was a familiar figure at our meetings within recent memory, though, when the Society was young, there were not many who took a more active share in its work than the late Dr. Motherwell. Dr. Paley, formerly Inspector of Lunatic Asylums, died in London; Dr. C. E. Wyer, formerly of Geelong, died in Scotland; and Dr. R. H. Sparrow, at South Melbourne, where he practised. None of them ever took an active part in the proceedings of the Society, but all of them did their share of professional work, and all were men whom we were glad to have associated with us. We have had a large accession of new members, and we may fairly hope to see some of them coming forward to fill, as workers, the places which are thus made vacant.

Having said these few necessary words about the Society and its work, I may be permitted to depart from what has come to be recognised as the usual scope of these Annual Addresses. Instead of entering on an account of those things of medical interest which have happened during the year among ourselves, or of the most important inventions and discoveries in medicine and surgery in other parts of the world, I desire to devote the remaining time at my disposal to some discussion, necessarily imperfect, of a sanitary question of prime importance both to us and to this whole community. I refer to typhoid fever, and especially its etiology, considered in the light of experience acquired in this city. Other epidemics we have, of equal and sometimes of even greater severity, measles and scarlatina, and to a less extent, diphtheria and whooping-cough. But they either leave us almost free from their inroads for considerable periods, or cause but a moderate mortality; while typhoid is so regular in its outbreaks, that it may well be described as endemic, and so fatal that it may rightly be called a scourge. Its prevalence and fatality may be measured by the fact that it caused no fewer than 2081 deaths, in Melbourne and suburbs, during the ten years, 1876-85, the mortality never falling below 157 in any one year, and rising as high as 307 in 1878.

In any discussion of the causation of typhoid as it occurs in this city, we may best make a beginning by instituting some comparison between our condition and that of the mother country. When we consider the comparative prevalence of the disease in this colony and in England, we are brought at once in the face of two important points of difference, namely:—(1) That while in England generally, and in the large towns particularly, there has been a great and steady diminution in the mortality from fever of late years, there has been little improvement in that respect here; and (2) that while in England typhoid is not a disease specially affecting great towns, the contrary is the case here, since the rate of mortality in Melbourne is, and has been, much higher than in other parts of Victoria.

With regard to the first of these points, the contrast is very striking. In England the deaths from fever, mainly consisting of those from typhoid, numbered 17,910 in 1870; they had fallen to 7,918 in 1883, in spite of a considerable increase of population. In Victoria the average annual mortality of the five years 1871 to 1875 was 360, while in the years 1881-85 the average was 473, the population not having increased in equal proportion. With reference to the second point, the comparative incidence of the disease in town and country, the difference between the countries is quite as striking. In England, in 1879, the mortality from fever in the 20 chief towns (including London) was at the rate of 2·9 per 10,000, while, in the rest of the country, it was 3·2, a slight but distinct enough difference in favour of the town population. In Victoria, on the average of the 10 years 1876-85, which may be taken as covering a corresponding period, the rate of mortality from typhoid, in Melbourne and suburbs, was 7·35 per 10,000, while in all other parts of the colony it was only 4·37. There can be no mistake, therefore, in the statement that the incidence of the disease is more especially on the town population of Victoria, while in England this is not the case. It is surely fair to assume further, that no discussion of the prevalence and causation of typhoid, as it occurs in this city, can be satisfactory, which does not take account of both of the points which I have just illustrated.

Before entering on any such etiological inquiry, we have to put these two questions:—(1) Why has typhoid fever diminished so greatly in England of late years, while here there has been no such reduction?—and (2) Why is the disease so fatal in Melbourne, as compared with the rest of the colony, while in England the town populations have greater immunity from its attacks than those of the rural districts and small towns? Put in a more general way, the question might be—Why have the English people been so successful in putting a check to the prevalence of typhoid fever, while our efforts in the same direction have so far had such poor results?

I do not propose giving a direct answer to these questions for the present, except by saying that the change for the better, which has occurred in England as well as in other European countries, is certainly owing to the adoption of various sanitary improvements, the effect of which has been to prove, beyond all doubt, that typhoid is eminently a preventable disease. We will have to discover then, if possible, why the efforts of our sanitary authorities have failed; for efforts, wise and well directed or not, there certainly have been.

Having got the question advanced to this stage, I may be permitted shortly to relate what have been the chief results of my own observations and inquiries, since I have been called to act as Health Officer of the City. As some of you know, the interest which I have taken in this question is by no means new, though no very long time has elapsed since it became part of my official duty to look closely into the matter. Accordingly, about a year ago the Local Board, at my request, issued a circular to nearly all the medical men practising in the City, asking them to report to me any cases of typhoid fever attended by them. It was necessary to ask for voluntary help, as there is not provision in the Health Act for the compulsory notification of cases of this disease. I cannot say that there was a very general response to the invitation, though some gentlemen did send me regular reports of cases under their care. In fact I had to depend mainly on returns from the registrars of deaths, on reports of cases admitted to the hospitals, and on information communicated to me by the Secretary of the Central Board. I did not expect to make any startling discoveries, in a field of inquiry which has been so long and carefully cultivated, but my moderate expectations of learning some facts of practical value were not altogether disappointed. Possibly my efforts might have been attended with a larger measure of success, if I had not been confined in my inquiries to the rather arbitrarily fixed limits of my own sanitary district, and if I could have had at my disposal promptly a larger proportion of the cases occurring even in it. Being limited in both ways, it is easy to understand that I may readily have missed connecting links, and so failed to trace local outbreaks to their special cause. Even of the cases reported, a considerable number could not be traced, on account of some error in the address given, and so the material at my disposal was further curtailed. Nevertheless, between December and August, I was able to collect about 150 cases, particulars of which were preserved in a tabulated form. In nearly all of them I visited the place and made inquiries into the history of the case, at the same time inspecting the house and its surroundings. In every case I tried to keep an account of the following particulars:—Name, age, address, date of attack, source of milk supply. In addition to these, my register had a column for the name of the reporter, and another for remarks, bearing mainly on the condition of the house, its yard, drains, &c., and the kind of surroundings, together with any other points which seemed to bear on the causation. With the view of getting help from the eye in discovering any tendency to special localisations, I also marked on a map of the city, as exactly as possible, the position of the houses in which the cases occurred. A considerable amount of material was thus collected, and a few of the facts and conclusions may not be without interest, even though they do not add materially to the general stock of knowledge on the subject.

I do not propose to discuss formally the question whether or not typhoid fever may originate in a locality in a so-called spontaneous way, *i.e.*, independently of the introduction of a specific virus derived from a previous case. That is still to some extent a disputed point, though the pathologists of Europe are more and more becoming unanimous in holding that there is no satisfactory evidence of such spontaneous origin, and much evidence against it. Certainly a large town is not the place from which can be derived data for the settlement of the controversy. We have rather to consider the conditions which favour the spread of the disease, after it has acquired a firm settlement. In the case of Melbourne, the point requiring investigation, with a view to decided action, is that of the condition or conditions which are specially operative in keeping up the persistent prevalence of the disease. These conditions, possible or probable, may therefore now be considered, in so far as they have come within the scope of my own inquiry, the incompleteness of which, in many respects, I am fully conscious of.

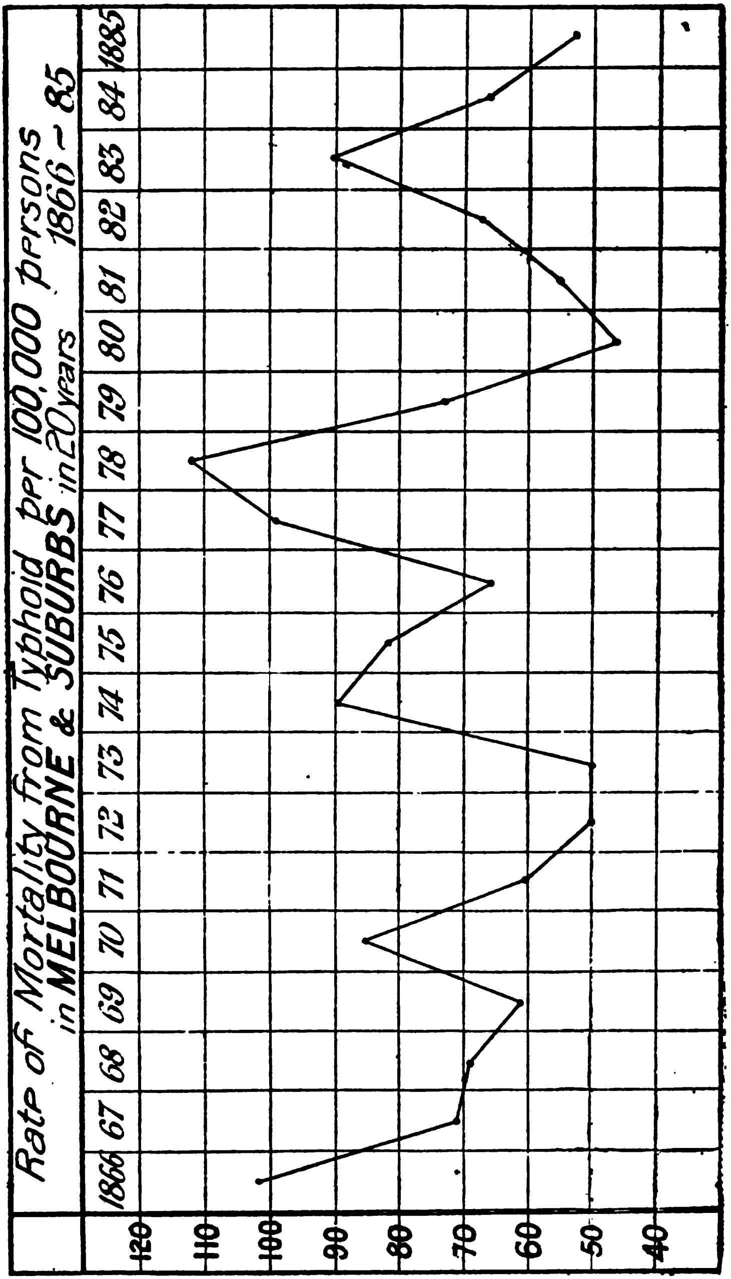
I. *As to Water Supply.*—I have no direct evidence either for or against its influence, though I am clearly of opinion that the part it plays is an unimportant one. Of course it has been placed beyond doubt that typhoid fever may and often does spread by means of water, which has become specifically contaminated, and I cannot deny the possibility of such contamination of the water supply of Melbourne being the cause, in part, of the severer outbreaks which occasionally occur, such, for instance, as those of 1878, 1883, and the year which is just past. But the following considerations, will, I think, tend to show that contamination of our water supply, cannot be an important cause of the prevalence of typhoid. It is better than that of most of the large cities of Europe, its sources are more carefully guarded, and it is continuous. And, in addition, we have this fact in the history of the disease, that, though the number of cases may vary considerably from year to year, each annual outbreak has its regular rise, acme, and decline from about November to June; and specific contamination at the sources cannot be supposed to occur with any such regularity. The question of course can only be of contamination at the sources, for, with a continuous supply, there is not the same danger of the entrance of exhalations, from the soil or from sewers, into the pipes, as when the supply is intermittent, with consequent liability to the production of a vacuum, into which gases and possibly fluids may be sucked. On the whole, therefore, whatever faults may be found with the Yan Yean water, it cannot rightly be charged, to any appreciable extent, with conveying the poison of typhoid to the consumers.

II. *As to Milk Supply.*—Here again there is hardly room for doubt that the virus of this disease may be conveyed by means of milk. I started on my inquiries with this cause strongly impressed on my mind as an important one, and quite expected to meet with cases taking their origin in this way. As far as possible, I tried to get the name of the milk supplier in all cases; but in no single instance, when inquiries were made, was evidence forthcoming of this particular mode of contagion. I do not assert that milk epidemics do not occur in this city, and indeed, one such outbreak was carefully followed out and recorded by my predecessor in office, Mr. Girdlestone, and by Dr. Allen. It may very well be that I missed the proof of any such occurrence during the past year, because I did not get reports of a sufficiently full series of cases to supply the links of a chain of evidence. I have to say further, however, that in cases where there was a kind of localised outbreak, I was satisfied that contaminated milk had not been the efficient cause, and I have no hesitation in asserting that the severity of the disease in 1886, was not due to the contamination of milk to a great and unusual extent.

Any special or determining influence on the rate of mortality from typhoid, in Melbourne, of such accidental causes as contamination of milk or water, seems to be excluded by the marked periodicity in the rise and fall of that rate when observed through a considerable series of years. It is clearly shown in the accompanying chart, which gives the number of deaths per 100,000 persons in each of the 20 years, 1866–85. I do not know that we have data which would enable us to determine what are the true causes of that periodicity. It may be assumed that it is due to meteorological conditions of some kind, which, of course, act only in association with other causes of a more local character.

If the two causes now considered can thus with much probability be eliminated, as potent factors in bringing about the excessive prevalence of fever in this city, we have to look for influences more continuously and more powerfully operative.

III. *Direct Contagion.*—Communication of the disease from person to person, as in scarlatina or typhus, has never been looked on as largely efficient in leading to the spread of typhoid, and it cannot be supposed to be, in that sense, more contagious here than in other parts of the world. It is true that the occurrence of a succession of cases, in the same house, does sometimes excite the suspicion that there has been such direct contagion, and I by no means deny its possibility. Indeed, my recent observations have made me more inclined than formerly to believe in the likelihood of such contagion. Examples of house epidemics, of a striking enough kind, I may have occasion to refer to in another connection; but the following instances are at least suggestive of personal contagion, and not merely of the influence of unhealthy surroundings or other indirect cause. A man named B. was admitted to the Alfred Hospital, on January 13th, 1886, suffering from an attack of typhoid, which dated from about the 1st. On the 24th of the same month, another man, S., was admitted from the same place, a hotel in Flinders-street, his illness having begun about the 16th. On inquiry it was found that they had occupied the same room, and that of more than 50 inmates of the house they were the only persons affected. The room was upstairs, the house fairly well kept, and with no underground drains, and there was no communication by down pipe from the bedroom to the yard or basement. The man, B., first affected, drank a good deal of milk, but the other did not. There was no evidence that the milk had been the cause of the


Rate of Mortality from Typhoid per 100,000 persons
in MELBOURNE & SUBURBS in 20 years
1866 – 85
1866
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
1885
120
110
100
90
80
70
60
50
40

attack in the first case, and that indeed was unlikely under the circumstances. It was possible that both men might have got the disease independently; but the circumstances seemed to me to be strongly suggestive of contagion from the one to the other. Another case may be given of a somewhat similar kind. A man was admitted to the Melbourne Hospital in June 1886, from a boarding-house in the north part of Queen-street. It was a double house, well constructed, and with good drainage. There was no other case at the time, but I learned that a man had been ill in the same way about three months before. Both had occupied the same bed, the mattress of which had not been subjected to any cleansing or disinfecting process. The second man had not occupied the bed long, another lodger having slept in it for a time before him, without being affected.

During last autumn, cases of fever occurred among the nurses or patients of several of the hospitals and other institutions, and one instance is I think of special interest. In that case, three nurses were affected almost simultaneously, and though it was considered possible that one of them might have acquired the disease outside, there was no reason to doubt that the other two had become affected in the institution, in which there were cases at the time. The drainage and general sanitary arrangements were good, but the system of disposing of the excreta was far from satisfactory. They were mixed merely with one per cent. solution of phenyl, and then emptied into a bucket standing in a place too conveniently near. This bucket was again emptied into a soil pan at night, for removal by the nightman. I could not discover any other likely cause than exposure to the exhalations, or even to the splash of particles from the bucket or pan, the contents of which could not with any propriety be described as disinfected.

All these cases have very considerable interest, and go far to show that there is more risk, than some of us think, of contagion from close contact with a person affected, or with fresh excreta, unless careful precautions are adopted. However this may be, it must nevertheless be admitted, that direct contagion cannot account for the great and continued prevalence of typhoid in this city.

But there are causes of another class, the importance of which may with more confidence be insisted on. I refer to imperfect removal of, and consequent defilement of soil and surface with filth of all kinds. It is here, if anywhere, that a discussion of the possible *de novo* origin of typhoid in a locality might most readily be brought in. But that discussion is too long and difficult, and besides I desire, as far as possible, to confine myself to facts having an immediate bearing on our own case.

Among the causes included in this class, mention must be made of—

IV. *The Influence of the Pan System of Night Soil Collection and Removal, as carried out in Melbourne.*—To begin with, I have to confess that I have no facts which clearly establish its influence as a means of spreading the contagion of typhoid. That it has some influence in that way I am quite prepared to believe, and any one who visits some of the more crowded parts of the city, and considers the large surface of fæcal matter in the numerous closets in close proximity to every house, must feel that the continuous emanation of foul vapours or particles must tend injuriously to affect the health in many cases. That emanations from pans, into which typhoid stools are emptied, may sometimes cause fresh cases is far from being an unlikely event. But, the very universality of the cause, if cause it is, makes the difficulty of proof great. There is no doubt that the system at present adopted all over the city is a very imperfect one. The sources of real danger are to be sought: first, in the emanations from pans not emptied with sufficient frequency; and second, in imperfect removal due to leaking or overflow, or to carelessness in the process of removal itself. In both these respects there is undoubtedly room for improvement, and in these directions, rather than in the adoption of special modes of treating the night soil, must we look for benefit to the health of the citizens. It is not feasible to carry out a system of thoroughly disinfecting the contents of the pans, either regularly by householders, or at the time of removal by the scavengers. If it were to be done in anything like an effectual manner, the cost would be enormous, and new risks would arise from the presence everywhere of what would really be active poisons. If disinfection, by heat or otherwise, were only to be carried out after removal, without other improvements of the kind already mentioned, I do not see that benefit to the health of the citizens could be expected to result; though I am quite prepared to allow, that if the infecting power of all fæcal matter could be destroyed, there would be increased safety to the community as a whole. That the universal use of deodorants of any kind would serve a good purpose, by abating the nuisance generally complained of, is true enough; but even efficient deodorisation would be costly, and unless something more than mere deodorising was accomplished, it is not at all clear that the public health would be appreciably benefited. It is not recognised as a wise policy to conceal a source of danger, by simply removing the signs of its existence, and deodorisation, as such, simply does this. But I prefer still to pass on, without stating what seems to me to be the efficient remedy.

Related to imperfect night soil removal, though capable of separate consideration, is

V. *The Influence of Bad or Insufficient Drainage, and the associated foulness of soil and surface.*—And when we come to this, I think we touch the most important cause of the persistent severity of our typhoid outbreaks, and also of what may be called the anomaly of its greater prevalence in the city and suburbs than in the smaller towns and rural districts. The extreme importance of this cause may be shown in two distinct ways: Either (1) striking examples may be collected, in which other causes, such as contamination of milk and water, could be excluded, while unhealthy surroundings of the kind referred to were present, and supplied the sole or most probable reason for the spread of the disease; or (2), proof may be obtained from the results observed in towns, where, independently of improvement in the water supply, the death-rate from typhoid rapidly fell, after a proper system of underground drainage had been instituted. With reference to the former of these modes of proof it may be said, that the influence of badly-constructed drains and sewers has often been established, and the injurious effect of excremental defilement of the soil is generally held to be great. I have met with some instances, in which unhealthy surroundings appeared to be the cause of localised outbreaks, and where no other efficient cause was discoverable. One of the most remarkable of these outbreaks was that which took place in Park-street, South Yarra, between January and March last. All the cases occurred on the west side of the street, from which the ground slopes away to the back. Several cases had occurred before any report was made to me, and indeed it was only by making inquiry from house to house that some of the cases were discovered. Out of a comparatively small number of houses along the line of the street, typhoid appeared in six, and I have notes of sixteen cases in all, no fewer than eight of them in one house, a large building used as a boarding-house. There had been a doubtful case of illness in this house previously, but the first one reported to me began on 7th January. Another followed on the 30th, after which there was a break, followed by a series of five, occurring between the 11th and 17th of March, and another of doubtful nature on the 25th. Milk was supplied by a cow kept on the premises. The house is a two-storey one, with a good-sized yard and garden behind, and it stands on the corner of Toorak Road, into which the drainage was conveyed by a pipe drain, running the whole length of the yard and communicating with the house by three untrapped openings. In case of the drain becoming infected, it is clear that there was ample opportunity for gaseous emanations finding their way into the house. And this was not all. A tank, containing rain-water for drinking purposes, stood in the yard, and its over-flow pipe was carried right down to a sink communicating with the house drain. Again, therefore, if the drain happened to be infected, there was the greatest likelihood of the drinking-water becoming contaminated. Below the house there was an excavation, into which surface-water percolated and remained stagnant. Finally, a part of the yard was fenced off for fowls and ducks, and in it there was a large stagnant pool of foul water. I am not prepared to say to what degree these insanitary conditions severally co-operated in bringing about this striking series of cases; but among them all there may be found ample cause for the spread of the disease, after it had found admission into the house. Independently, too, of the occurrence of the disease in it, the state of things discovered is interesting, as showing that radical defects of the most serious kind may exist, where, to the casual observer, the situation and general arrangements might seem to be of quite a superior kind.

There was no apparent connection between the cases in this house and those which occurred in other houses of the street. One case occurred in each of three of a short row of old brick cottages near the Domain Road, and three others in a wooden cottage adjacent to them. All of them came on between the 4th of February and the end of that month. Milk was got in a promiscuous way, and certainly from several suppliers; and one of the houses got it from an unimpeachable private source. All these houses had this in common, that the drainage was conveyed away in pipes to the back, that some of these certainly communicated, and that all led into an open drain, which conveyed the accumulated sewage to another street at a lower level. Here, then, if the drain from one house became infected with the specific poison, there was abundant opportunity for the others being contaminated from it, or for emanations finding their way up along the pipes to the houses. Two cases occurred in children in another house, a wooden cottage, not connected with the others in any known way, though its means of sewage removal were also bad. The first occurred on the 5th of December, and the other on the 23rd of January, and at the time when the disease appeared, the children were getting only Swiss preserved milk.

In this severe local outbreak we were able to eliminate the milk supply as a common, or even to any appreciable degree as a co-operating cause; though, in the house where eight cases occurred, it may have been that the last four or five cases took their origin in contamination of the milk on the premises. There could hardly have been a special contamination of the water supply of all the houses; and there need be little hesitation in ascribing the outbreak as a whole to bad sanitary conditions, favouring the spread of the disease after its introduction in some way not traceable.

I met with quite a number of other examples of house epidemics, of which the following may serve as a sample. In a house in Queen-street, four brothers became affected in succession, between 1st May and 18th June, the mother being the only other inmate. The house was an old one, and had a cellar kitchen, from which went a deep drain, opening into a right-of-way a good way off. The small yards of this and the adjacent houses were dirty and ill-kept. Instances of localised outbreaks affecting persons in two or three adjacent houses were noted, and I may say generally that, when inquiry was made, conditions were discovered about the house and surroundings, whether bad drains, unusually dirty rights-of-way or soakage of the foundations with foul water, which went far to account for the local prevalence of the disease. Independently, however, of such small outbreaks, which occurred in various parts of the City, I was unable to discover any distinct tendency to endemicity in any larger districts; though it would probably require observations carried on through a series of years, to establish such localisations on the large scale.

The general result of these inquiries has been to impress strongly on my mind the importance of local insanitary conditions of the various sorts already mentioned. My conviction is indeed a clear one, that to the absence of any proper system of drainage in Melbourne, and the consequent defilement of the surface and the soil, around and beneath the houses, we owe more than to any other cause, or indeed to all other causes together, what may well be described as the disgraceful prevalence of typhoid in our midst.

Our experience in many respects is, up to a certain point, that of many of the European cities, and especially of some of the Continental ones, in which improvement of the water supply preceded the introduction of a proper system of drainage, and where there was no marked reduction in the typhoid mortality, until provision was made for the sweeping away of all kinds of foulness by means of properly constructed sewers. In Munich, for instance, certain parts of the city were provided in 1865 with a greatly improved system of water supply. But in the very next year there was a violent outbreak, which affected these districts as severely as the others. In fact there was little improvement till after 1870, when the drainage works were begun; while gradually with the extension and perfecting of these, there was a continuous fall in the death-rate from fever, till, from a mortality from this cause of 242 per 100,000 inhabitants, in 1852–59, the death-rate fell to 14 per 100,000 in 1884. The improvement to that extent, indeed, was practically complete before new arrangements were made for the water supply of the city in 1883–84. The experience of Dantzic was somewhat similar. Between 1863 and 1871, the death-rate from typhoid was in the proportion of 99 per 100,000 inhabitants. The introduction of a water supply, in 1869, had hardly any appreciable effect in reducing this, while the effect of the carrying out of drainage works, in 1872, was that the mortality rapidly fell to an average of 15 per 100,000 in the years 1878 to 1883.

It seems to me, therefore, that by this double system of proof, it may be taken as established beyond reasonable doubt, that the one great sanitary need in Melbourne is a complete system of drainage; not merely to carry off storm waters and lessen the amount of dampness in the sub-soil, but also to serve as a channel for the rapid and complete removal of excremental and other household waste products capable of being removed in that way.

It is useless to conceal the fact that, with a city scattered over such an extensive area as Melbourne, any proper system of sewerage can only be carried out at enormous expense. But our present system of removing night-soil and cleansing our lanes and bye-ways, while it is absurdly inefficient, and in many ways disgusting, is carried on at no small cost. To that expense ought fairly to be added the loss in health and life, occasioned by the ravages of preventable disease, typhoid chiefly but not alone. It is clear that we cannot go on for ever with our present makeshift methods of scavenging and night-soil removal, and with every year the task is becoming a more gigantic one. And further, in the absence of a proper system of drainage, applicable to the whole of the metropolis, or even to its more central muncipalities, money is being spent on isolated works of construction, which probably will not fit into that system when it comes to be made. Not only so, but such minor works, intended only to meet urgent local needs, may actually introduce new sources of danger, owing to imperfect construction. The examples which I have had occasion to refer to, show that bad drains may be very much worse than any kind of open channel, which at least reveals its own foulness, and is all the less harmful that it cannot concentrate, and introduce into the very interior of houses, the products of putrid or specific fermentation.

The cure for the evil case into which we have fallen, as regards sanitary matters, is to be found, I believe, only in the adoption of a system of underground drainage, with water carriage of night-soil and all other impure liquid waste matters. A necessary preliminary to the adoption of any well considered scheme, however, must be the formation of a Metropolitan Board of Works, embracing in the sphere of its operations all the central and most densely populated muncipalities—Melbourne, Fitzroy, Collingwood, Richmond, Hotham, Port Melbourne, and South Melbourne, and as many others as can be induced to connect themselves. Without feeling myself to be an obstructive, therefore, my opinion goes with those who insisted, at a recent conference, that important and expensive works, of uncertain usefulness, for the utilisation or destruction of night-soil and other waste products, may well be postponed, lest the attention given to them should interfere with the formation of the Board, by which alone we can hope to see really great and permanently useful work done. And while this is so, it does not follow that we need be idle. The emptying of soil pans ought to be done more frequently, and the process might be made less unpleasant by the use of deodorants and the adoption of some kind of covered pans, which could be removed and replaced by clean ones. Even then, though the nuisance to the citizens would be greatly abated, the ever increasing difficulty of disposing of the excreta would remain. It is that difficulty, more than any other, which will soon compel action and combination on the part of the municipal authorities. In fact, the difficulty and expense, attendant on a very imperfect system, will make the adoption of some better procedure necessary at no distant date. Then, besides night-soil removal, the cleansing of streets and lanes ought to be undertaken in a far more efficient way than the present. Anyone who is acquainted with the manner in which scavenging processes are carried out, in every well-managed corporation in Great Britain, must be painfully conscious of the impossibility of keeping a city even reasonably clean, on the terms of a twice a week sweeping up and removal of refuse; twice a week, let us say, at the oftenest, and often rather perfunctorily at that. Still there are degrees in dirt and untidiness, and the fact that the typhoid mortality is lower than the average, in those parts of the metropolis which are under the rule of the City Corporation, is best explained by the more than average care with which surface foulness is cleared away. If I were to mention another favourable condition, it would be the facilities for natural drainage, afforded by the slope of the ground on which the most densely populated parts of the City are built.

But, after all, the difficulty which stands in the way of the needed improvements is the money one. The average ratepayer needs to be educated up to the point of understanding that money expended on sanitary works of a right kind is well invested. As yet the intelligent and far-sighted in regard to such matters are in the minority, and a special cleansing rate will always be protested against, and often prevented by the less enlightened many. The members of a Metropolitan Board of Works might be expected to be less directly amenable to the will of those who, whether from poverty or ignorant selfishness, may be expected always to oppose the liberal expenditure of money on mere cleanliness. I do not wish to prophesy, but if the periodicity with quadrennial intervals, shown in the chart, is real and not accidental, another acme ought to be reached in the present year, 1887, and probably of considerable intensity. But out of evil often comes good, and if a severe epidemic of fever hastens the formation of this Metropolitan Board, and the carrying out of much needed works, the trouble and loss will not have been altogether unmixed.

In spite of all the inquiries which have been made into the origin and spread of typhoid, there is doubtless still much to be learned. The late Dr. William Thomson did good service, especially in pointing out and emphasising the contagious nature of the disease, and the need of what may be called bedside measures of prevention. In that he did well; but, as I repeatedly insisted during his life, and as I still think, he erred in laying too little stress on the importance of general sanitary conditions, and undervalued the benefits to be derived from such improvements as I have here insisted on. Sometimes it seems to be necessary, however, to lay undue stress on one side of a great question, in order to get public attention directed to it at all. Dr. Thomson's etiological inquiries and speculations will certainly entitle him to the gratitude of all friends of sanitary improvement in this Colony.

It is to be regretted that the results of an inquiry made by our Secretary, Professor Allen, a few years ago, have never been published in full. I cherished the hope that a summary of his observations, and the conclusions based on them, would have appeared in the *Australian Medical Journal* before now; and I still trust that his many engagements will not prevent him from yet arranging his materials with a view to publication.

As I said, there is still much to be learned about typhoid, and it may readily be in the power of members of this Society to make contributions toward the perfecting of our knowledge. Not very many may be able to contribute largely to that end; but it may be taken for granted that here, as in other parts of the world, the members of our profession will always take a leading part in the work of sanitary improvement. Great and noble work can be done in the mitigation or cure of disease, but greater and nobler even is the task, which equally falls to us, of enlightening popular ignorance, and thus indirectly, as well as by more direct effort, helping to lessen the mass of preventable disease.

Dr. J. P. Ryan then proposed, and Dr. Haig seconded the following motion :—"That a hearty vote of thanks be accorded to Dr. Jamieson for the able address just delivered, and for his services as President during the past year." The motion was carried by acclamation and was duly acknowledged by Dr. Jamieson.

Alteration of Rules.

On the motion of Professor Allen, it was resolved that the proposal to raise the annual subscription of town members be remitted to the new Committee.

Australian Medical Journal.

JANUARY 15th, 1887.

THE JOURNAL.

During the past year the *Journal,* we trust, has been found by its readers to have in no way fallen back from its previous level of usefulness. There has been a steady increase in its circulation, and contributions by members of the profession residing in Tasmania and New Zealand, as well as in Australia, have appeared in its pages. We cannot of course say, like the conductors of another Medical Journal, that it is the accredited organ of all—literally *all*—the principal Medical Societies in these Colonies; but we have no reason to be anything but proud, both of our contributors and of their work. More than in any previous year, too, we have been able to supply charts, photographs, and other illustrations, as helps to the complete understanding of articles which have appeared. During the greater part of the year we have had no reason to complain of any lack of matter, and indeed, lately, we have sometimes been compelled to try the good nature of contributors by keeping back the publication of articles of interest. We have been even more ungracious, and asked some of them to shorten their contributions, or worse still, have used the editorial pen for that purpose. However, these are things not quite unknown in other parts of the world, and even the *British Medical Journal,* with its weekly issue, and large amount of space, has recently had to give its contributors a friendly notice that " prolixity is a great bar to publication," and that " brevity of style and conciseness of statement greatly facilitate early publication." We have not, it is true, got quite to the pass of saying, "We are compelled to decline or hold over indefinitely a great number of communications, chiefly by reason of their unnecessary length;" but the demands on our space have been steadily increasing, and we hope contributors will be as indulgent as possible in case of delay. We can always find room for contributions of value, and, if necessary, and circumstances otherwise be favourable, a few additional pages may be added occasionally, as happened once during last year. Thanking all our supporters, therefore, for kindly help and forbearance, and promising to do our part in making the *Journal* increasingly useful, we wish them all "A Happy New Year."

THE INTERCOLONIAL MEDICAL CONGRESS.

We were unable to do more in our last number than barely mention the fact that the first meeting of Members and Subscribers had been held, and that Dr. Verco had been chosen to act as President. Fuller information has since reached us, and we wish to put the substance of it before our readers. The Provisional Committee reported that the University Council had granted the use of such rooms as might be required for the meetings of the Congress; that sixty members of the profession in South Australia had promised their support, and that £50 had already been received as subscriptions.

Dr. B. Poulton was elected Honorary Secretary, and Mr. Hayward, Hon. Treasurer; and a committee of twenty appointed, with power to add to their number. The following are the names of the Members of Committee:—Drs. Gardner, Way, Thomas, Watson, Mitchell, Stirling, Symons, Görger, Lendon, Paterson, Cleland, Stewart, Giles, J. A. G. Hamilton, Messrs. Hayward, Clindenning, Corbin, Jay, Toll, and the Hon. John Cockburn, M.D., Minister of Education.

The Committee were given full power to make all arrangements with reference to the work and conduct of the Congress, and were instructed to report to the Subscribers at a General Meeting to be held in June.

BURROUGHS, WELLCOME AND CO.'S NEW PREPARATIONS.

This well-known firm has established an office in Melbourne, for the purpose of having their special interests fully represented. We have had occasion before to refer to some of the chief pharmaceutical articles sent out by them—as Kepler malt extract and its combinations, pepsin in scales, extractum pancreatis (zymine), and the hypodermic tabloids. Of these latter, several new forms have been issued—as apomorphine, ergotinin, digitalin, cocaine, aconitine. To accompany these, they have also arranged to supply a cheap but useful hypodermic syringe, in a case of convenient size, but still large enough to contain a small glass mortar, and with space for six tubes of the tabloids. In that way, quite a stock of active remedies may always be kept ready for emergencies. Several of them we have tried, and can vouch for their efficacy. To the compressed tabloids for internal use, some of which are well known, a number of new ones have been added, of which special mention may be made of those containing cocaine, with borax and chlorate of potash, which are specially calculated to be of use in irritative affections of the throat.

From Mr. W. Shepperson, who acts as agent for Messrs. Burroughs, Wellcome & Co., we have received *The Medical Man's Handy Book.* This useful little work contains a very full list of incompatibles, a list of poisons and their antidotes, and tables of doses of the more powerful medicines contained in the chief pharmacopœial compounds, besides other information calculated to be of use to the prescriber.

IMMISCH'S METALLIC THERMOMETERS.

These thermometers have been very favourably noticed in the leading scientific and Medical Journals in Great Britain. They are in appearance like a small watch, and are very convenient for use, being less liable to breakage than the ordinary glass thermometers. For clinical purposes they have distinct advantages, being both sensitive and accurate; and though they are not yet made self-registering, the highest point marked is retained long enough to allow of exact note being taken. Messrs. Allison Bros., of Collins Street West, who act as agents, inform us that Mr. Immisch has succeeded in adapting the self-registering system to the instrument, but has not yet put it on the market.

Review.

PRITCHARD ON DISEASES OF THE EAR.*

This is the latest addition to Lewis's Practical Series. The author disclaims any idea of offering to his readers an exhaustive treatise or even a digest of works already published, but, to use his own words, "a practical manual which shall help them to recognise the various pathological lesions of the ear, to diagnose the different diseases, and to discriminate in the matters of treatment and prognosis."

So many books on aural surgery have made their appearance during the last few years, that it must be very difficult to find any new subject matter, or indeed, anything that could make a distinctive feature, except perhaps the arrangement of the text, and here, certainly, Dr. Urban Pritchard has made a somewhat new departure. The large black type, used as headings, makes reference easy and agreeable, nor are the subjects wrapped up in any superfluous wording, so that as a student's handbook, we fancy it will find favour.

The first chapter, on the anatomy and physiology of the ear, is especially excellent, and is much more likely to be read and understood by the average student than anything we have seen in kindred works. This might have been expected from Dr. Pritchard, who has perhaps paid more attention to this branch of the subject than any specialist since Toynbee's time.

This clearness of description is not, however, uniform throughout the book; for example, his account of Valsalva's method of inflating the tympanum, if followed in the case of a patient suffering from catarrh, would lead to disappointment, as it fails to explain that considerable force is required to urge the air into an obstructed Eustachian; mere swallowing with cheeks inflated will not do this. Dr. Urban Pritchard makes such particular mention in his preface, that he wishes to avoid controversial points, and to give simply the results of his own observation and practice, that we feel somewhat disarmed in criticising his treatment. Yet there can be no doubt that exception would be taken by most specialists to "syringing under chloroform," p. 66; poulticing in furuncle of meatus, p. 71; syringing exostoses, p. 81;

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* Handbook of Diseases of the Ear, for the use of Students and Practitioners, by Urban Pritchard, M.D., F.R.C.S. London: H. K. Lewis, 1886.

and filling the meatus with spirit of wine, p. 79. Still as he has allowed these things to go out under his name it will be for the reader to accept or reject his advice.

The little book, however, is so nicely got up and arranged, that it will certainly find a place in many medical libraries, and for those who do not care to study more exhaustive works, it will be found useful for ready reference. C. L. M. I.

University Intelligence.

MELBOURNE UNIVERSITY.

At the meeting of the Council on the 20th ult., a letter was received from the Faculty of Medicine, recommending the appointment of a Committee of the Council to deal with the erection of buildings in the Medical School Reserve, comprising additions to the chemical theatre, a practical chemistry class room, and a biological laboratory. The letter was referred to the Chairman of the Building Committee, Dr. Robertson and Dr. Fetherston.

A letter was received from the Dean of the Faculty of Medicine, intimating that the Faculty had adopted the following resolution:—"That the Faculty of Medicine direct the attention of the Council to the necessity for appointing the Lecturers on Therapeutics, Dietetics and Hygiene, and on Materia Medica, Medical Botany and Elementary Therapeutics, as soon as possible, so that they may prepare lectures for the ensuing year. The Faculty has to again recommend that Dr. Williams be transferred to the Lectureship on Therapeutics, Dietetics and Hygiene, in accordance with his request, and that applications be invited from candidates for the Lectureship on Materia Medica, Medical Botany and Elementary Therapeutics."

It was decided that applications should be invited for the Lectureship on Therapeutics, Dietetics and Hygiene, to be sent in by the end of the year, and considered by the Council at a meeting to be held on the 10th of January.

The Faculty of Medicine recommended that Mr. Kirkland should be appointed Demonstrator of Chemistry, at a salary of £300 per annum, and Mr. J. W. Barrett, M.B., Demonstrator of Physiology and Histology, at a salary of £200 per annum. It was decided that applications should be invited for both offices, to be considered at a meeting of the Council on the 10th January, the salaries being fixed at £200 and £100 respectively.

At the meeting on the 10th inst., Mr. W. Baldwin Spencer, M.A., Fellow of Lincoln College, Oxford, was elected Professor of Biology, his name having been placed first on the list of Candidates by the Committee acting in England. Dr. J. W. Springthorpe was elected Lecturer on Therapeutics, Dietetics and Hygiene. Mr. J. B. Kirkland, Demonstrator of Chemistry, and J. W. Barrett, M.B., Demonstrator of Physiology and Histology.

At meetings of the Senate on the 17th and 18th ult., the regulations referring to the proposed Degrees in Science were considered, and with some amendments adopted and returned to the Council.

At another meeting on the 10th inst., Mr. Justice A'Beckett was elected a member of the Council.

The following are the class lists at the recent Honour Examinations :—

FIRST YEAR MEDICINE.

First Class.—Horace Percy Godfrey.

Second Class.—John Richards Harris, William Wilkinson Boothroyd Pinniger, John Henry Joseph Crowley.

Third Class.—John Gilbert M'Kay, Egbert John Connell, Paul Ward Farmer, Thomas Cook, equal; John James Kitchen, Victor Joseph Emanuel Zichy-Woinarski, equal; James Livingstone Thompson, Leslie Davies, Garnet Soilleux.

SECOND YEAR MEDICINE.

First Class.—None.

Second Class.—Thomas Cherry, William Jens Gregerson.

Third Class.—John Raymond Fox, Horatio Percy Martell, Patrick Francis Gleeson, John Michie.

THIRD YEAR MEDICINE.

First Class.—William Perrin Norris.

Second Class.—William Howard James, Francis Edward Webb, Edward Allan Mackay, Thomas Murphy.

Third Class.—Edward Henry Embley, John Chalmers Baird.

FOURTH YEAR MEDICINE.

First Class.—Lionel Francis Praagst, Percy Herbert Liddle.

Second Class.—Conway Montgomery Macknight, Frank Hobill Cole.

Third Class.—Walter Joseph Craig, Frank Smith Crowther, equal; Godfrey Howitt.

The Exhibitions in Medicine were awarded as follows:—

First Year.—Horace Percy Godfrey.

Second Year.—Thomas Cherry.

Third Year.—William Perrin Norris.

Fourth Year.—Lionel Francis Praagst.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At a meeting of the Committee on the 28th ult., a report was received from the Sub-Committee appointed to meet members of the Medical Staff, on the question of providing extra accommodation for typhoid cases. It was proposed to erect tents in the grounds capable of accommodating about 200 patients. After some discussion, the report was withdrawn, in order that the Sub-Committee might bring up detailed recommendations.

A suggestion was made, and seemed to meet with approval, to purchase the Women's Model Lodging House.

At the meeting on the 11th inst., a letter was received from Dr. James Robertson, urging the necessity of reducing the number of beds in wards 11, 12, 16, and 17, so as to afford an area of 2,000 instead of 1,500 cubic feet for each patient. This was more imperative on account of the admission of a number of patients suffering from typhoid fever, and the oppressively warm and stagnant atmosphere in the wards, by which the death-rate was greatly influenced. The Secretary was instructed to reduce the number of beds so as to afford an area of 2,000 cubic feet for each patient.

A letter was received from thirty-two of the nurses, asking that the large rooms allotted to them might be sub-divided into small ones. The letter was referred to the Building Committee, with power to act.

Mr. James, Honorary Surgeon, wrote complaining of the frequent changes in the Resident Staff. The letter was referred to Mr. Gregory, with the view of having a rule drawn up, to compel Resident Medical Officers to continue in office for twelve months.

A report was presented showing that forty-five typhoid cases had been admitted between Nov. 12, 1886, and Jan. 6, 1887.

ALFRED HOSPITAL.

At the meeting of the Committee on the 7th inst., a letter was received from Dr. Backhouse, resigning the position of Resident Surgeon, which he has held for five years. The resignation was accepted with regret.

The Hospital Sunday Fund, amounting to £8,727 has been distributed as follows:—Melbourne Hospital, £2,806 17s. 7d.; Alfred Hospital, £1,449 17s. 11d.; Benevolent Asylum, £897 1s. 1d.; Women's Hospital, £780 15s. 2d.; Hospital for Sick Children, £853 16s. 3d.; Eye and Ear Hospital, £521 17s. 6d.; Homœopathic Hospital, £400 6s. 4d.; Austin Hospital, £525 5s. 9d.; Immigrants' Aid Society, £340 2s. 5d. Special votes, irrespective of the subscription lists, were made as follow:—Collingwood Dispensary, £50; Richmond Dispensary, £50; Convalescent Home for Women, £30; Convalescent Home for Men, £25.

Vital Statistics.

The report of the Government Statist on the vital statistics of Melbourne and suburbs, for November 1886, shows that the births of 1,135 children, viz., 597 boys and 538 girls, were registered during the month.

The deaths registered numbered 665, viz., 363 of males and 302 of females.

To every 1,000 of the population of the district the proportion of births was 3·29, and of deaths, 1·93.

Ninety-five deaths occurred in public institutions.

The number of children under one year who died was 294, the total under five years of age being 357.

Deaths from specific, febrile, or zymotic diseases rose from 50 in October to 137. This was owing to the marked increase in the mortality from diarrhœal diseases. These caused 111 deaths, as against only 13 in October; deaths from diphtheria also increased from 4 to 7. On the other hand, deaths from whooping-cough fell from 10 to 5, deaths from typhoid fever from 6 to 1, and deaths from measles from 4 to 3. Also, as a result of the increased heat, deaths from atrophy, debility, and inanition (almost entirely of infants or young children) increased from 21 to 61. Five deaths of child-bearing women took place in November, or 1 death of a mother to every 227 births registered, a proportion much below the average.

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentlemen have registered their qualifications:—William Robert Boyd, Sandhurst, M.B. Melb. 1886; Alfred Victor Millard Anderson, Parkville, M.B. Melb. 1886; John Henry Carney, Echuca, M.B. Melb. 1886; William Kilpatrick, South Melbourne, M.B. Melb. 1886; William Lowell Mullen, South Melbourne, M.B. Melb. 1886; John Frederick William Manson, East Brunswick, M.B. et Ch B. Melb. 1886; Alfred Alexander Parry, Royal Park, Melbourne, M.B. Melb. 1886; Thomas Francis Ryan, Ararat, M.B. Melb. 1886; Edward Emerson Rosenblum, Ballarat, M.B. Melb. 1886; Carl Peter Wilhelm Dyring, Melbourne, M.B. Melb. 1886; James Service Thompson, Oakleigh, M.B. Melb. 1886; George Campbell Rennie, Kyneton, M.B. Melb. 1886; Arthur Mackenzie Wilkinson, Queenscliff, M.B. Melb. 1886; Robert James Loosli, St. Kilda, M.B. et Ch. B. Melb. 1886.

HEALTH OFFICERS.—The following appointments have been confirmed:—Borough of Clunes.—Montague William Cairns Perceval, L.K.Q.C.P., *vice* Robert Colquhoun, L.R.C.P., deceased, Shires.—Rosedale—George Albert Walpole, L.K.Q.C.P., *vice* Thomas Dealtry Atkins, L.R.C.P., resigned; Omeo—David Taylor, M.B., *vice* Henry A. Samson, M.B., resigned; Phillip Island—Charles William Rohner, M.D.

Dr. Perceval, of Clunes, has been appointed a Certifying Medical Practitioner under the Shops and Factories Act, in place of Dr. M'Lennan, resigned.

One of the most important events of the month has been the introduction of small pox once more into these Colonies, the infection being from a passenger in the German Mail Steamer *Preussen.* The man was known to be affected when the steamer reached Albany, but he was allowed to go on with it to Adelaide, where he died. At that port, and at Melbourne and Sydney, the passengers for each place were at once put in quarantine. There must have been little or no attempt at isolation of the patient, for a large number of cases have occurred at each port, nearly 30 at Melbourne, and about 80 at Sydney. When the number of cases is so great, it will be difficult to prevent the disease being carried in some way outside of the quarantine ground to the general population. Dr. Sutherland and Dr. Porter are in charge of the passengers quarantined, the latter having been sent after it was found that the outbreak was actually a serious one.

It is most absurd that, since a system of quarantine has been adopted in these Colonies, it should be carried out in such ridiculous fashion. After the conference which sat in Sydney to discuss all kinds of sanitary questions of intercolonial interest, it is astonishing that nothing has been done to carry out some kind of federal quarantine, in virtue of which, cases like the present would have been dealt with at the first port of call. It seems probable that if the patient who first suffered from the disease had been removed at Albany, the other passengers might have escaped. The expense attendant on stamping out the present outbreak is likely to be great, and would have gone far toward the institution of fully equipped federal quarantine stations at the places where ships from abroad first touch.

The case of the Secretary of the Pharmaceutical Society against the Equitable Co-operative Company has been finally decided. The full court ruled that the bench had decided wrongly in favour of the defendant, on the ground that the company had a qualified chemist in charge of the druggist's branch. The bench accepted the verdict, but refused to order more than the nominal fine of 20s., with £2 12s. cost. The actual expenses must have been heavy, and time will show whether the Pharmaceutical Society will try to have the verdict thus obtained applied to other companies or stores trading in medicines along with other articles.

BIRTHS.

Honman.—On the 15th ult., at Glichut, Williamstown, the wife of Dr. Honman of a daughter.

Meyers.—On the 16th ult., at Rushworth, the wife of Dr. Meyers, of a son.

MARRIAGES.

Eccles—M'Cutcheon.—On Nov. 15th, at St. Matthias' Church, Paddington, by the Rev. Canon Rich, J. V. Eccles, M.D., of Melbourne, to Edith, second daughter of J. W. M'Cutcheon, of Woollahra, Sydney.

Maclean—M'Dougall.—On the 16th ult., at Dunolly, Redan-street, East St. Kilda, by the Rev. J. G. Mackie, Hector Rath Maclean, M.B. C.M. Edin., Williamstown, to Katie Fraser, youngest daughter of Duncan E. M'Dougall, Esq., of East St. Kilda.

Sparling—Le Cren.—On the 14th ult., at St. Colomb's Church, Hawthorn, by the Rev. T. C. Armstrong, Dr. William Augustus Sparling, Burwood-road, Hawthorn, to Emma, only daughter of Charles Le Cren, Esq., St. James's Park, Hawthorn.

DEATHS.

Hood.—On the 31st ult., at Ondit, Nancy, wife of John Hood, Surgeon, aged 76.

Brown.—At Palmerston, N.Z., William Brown, L.R.C.P. et L.R.C.S., Ed., aged, 38 years.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in Pamphlet form by communicating with the Publishers before the issue of the *Journal*.

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Australian Medical Journal
FEBRUARY 15, 1887.

Original Articles.

HEREDITARY SYPHILIS.

By G. A. Syme, M.B. Melb., F.R.C.S. Eng.

Among recent additions to the literature of syphilis, two monographs on the inherited form of the disease seem especially deserving of attention. These are "Syphilis et Rachitis," by the late M. Parrot, whose investigations on this subject are well known, and "Syphilis Hereditaire Tardive," by M. Alfred Fournier, the Professor of Dermatology and Syphilis at the Paris Faculty. Inasmuch as M. Parrot's work deals chiefly with the earlier, M. Fournier's solely with the later, manifestations of hereditary syphilis, the one is in a manner complementary to the other, and the two works may be very conveniently considered together.

It is much to be regretted, that owing to M. Parrot's untimely death, his work was not prepared by himself. Had it been so, it would almost certainly have assumed a very different form from the present. Instead of an original composition we have merely a compilation from his various lectures and writings. We have a pretty full exposition of his ideas, however, and that is the main thing.

We may first consider M. Parrot's well-known theory, "that all cases of rickets have but one origin—hereditary syphilis." He was led to enunciate this theory as a result of very close observation of certain bone lesions, regarded by him as diagnostic of hereditary syphilis. Tracing out what he conceived to be their normal evolution, he found they underwent a series of changes, which he divides into three periods. In the first period the medullary portions of the bones undergo what he terms a chondro-calcareous degeneration, while hard osteophytes are produced from the periosteum. In the second period the medullary portions undergo a gelatiniform degeneration, and the periosteal osteophytes become semi-hard. In the third period nodosities form about the epiphyses, which are liable to become dislocated, fractures of the diaphyses often occur, and the osteophytes become soft and spongy. In other words, the bone conditions are those of classical rickets. The first two periods are accompanied by incontestably syphilitic changes in the skin, viscera, &c. The third period occurs from the sixth month to the second year, with no other signs of hereditary syphilis, except occasional cicatrices or dental malformations. These conclusions are based on thousands of clinical observations and hundreds of post-mortem examinations, and are supported by innumerable specimens, beautiful plates of many of these being appended to the work.

On these grounds then M. Parrot builds his theory. Will it stand? In M. Fournier's opinion, "a definite judgment cannot be pronounced at present," as long clinical and pathological study is required for this purpose. "In criticising the doctrine, two points must be kept distinct—facts and theory. First as to facts. Is rickets observed with an incontestable degree of frequency in those affected with hereditary syphilis?" M. Fournier has long observed that it is, and has also long maintained that there is some connection between the two diseases. "How is this connection to be explained? Here theory plays its part. M. Parrot has probably gone too far in asserting that every case of rickets is due to syphilis. Rickets occurs in many conditions, and is a general, nutritive disease, and inasmuch as syphilis produces mal-nutrition, it is an indirect, but not the sole cause of rickets." This view of M. Fournier's is probably very near the truth, though our own experience would lead us to consider syphilis as more rarely a cause of rickets than M. Fournier seems inclined to do. There can be no doubt also, that syphilis and rickets may occur independently in the same patient. M. Parrot regards craniotabes as absolutely diagnostic of hereditary syphilis. This again is a moot point. Elsasser, who first described this condition, considered it due entirely to rickets. Dr. Barlow has investigated the question with much care, but his conclusions can hardly be regarded as satisfactory. At first he was inclined to regard it as a purely syphilitic manifestation, now he says it is rachitic, although he admits he has seen it, or rather the cranial bosses with which it is associated, in syphilitic infants with no other sign of rickets. This would seem to suggest that the changes are the direct result of a defective nutrition, this in turn being capable of being produced either by rickets alone, or by syphilis alone, or by both combined; unless indeed his observations be taken to support Parrot's theory of the identity of the two

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diseases. Hypertrophy of the spleen is another condition M. Parrot believes to be constantly present in hereditary syphilis, and when detected during life, to be one of the best signs of the malady. The subject of syphilitic pseudo-paralysis of the newly born is one that M. Parrot was the first to investigate, having clearly demonstrated, in 1872, that it resulted from changes in the long bones produced by syphilis. The manner in which M. Parrot arrived at this conclusion is a most masterly piece of clinical and pathological observation, and exhibits well his rare talent in this respect.

With regard to the transmission of hereditary syphilis, M. Parrot holds the somewhat peculiar view that the virus is transmitted to the child through the father only. It would be impossible to refer to the details of the clinical and pathological appearances of all the various lesions of the skin, viscera, &c., found in infants affected with hereditary syphilis, of which a most exhaustive account is given in M. Parrot's work. The language employed throughout is admirably clear and vigorous, and the clinical descriptions graphic in the extreme. A word of high praise must not be omitted for the artistic and well executed plates in the appendix.

Turning now to M. Fournier's work we find the main idea running through it to be that the influence of hereditary syphilis pursues its victims into *advanced* life, and is capable of causing lesions of almost all the structures of the body, not only in childhood, but in youth and even adult age; these lesions being constantly misconceived, and as a rule ascribed to scrofula. M. Fournier maintains that hereditary syphilis may remain latent for years, and then break out and cause lesions which require the greatest care for their correct diagnosis. According to his experience, the medical public generally are very sceptical about these late manifestions of hereditary syphilis, and are apt to consider the disease as confined to infancy, or that if apparently cured then, nothing more is to be feared from it; or that if the issue of a syphilitic parent shows no signs of the disease in infancy, it has escaped altogether. M. Fournier remarks, that often when in consultation, he has stated his belief that such and such a lesion was a late manifestation of hereditary syphilis, his professional brethren have received his opinion with scorn and incredulity, and considered it an illusory theory. The *raison d'être* of his work is to demonstrate that the doctrine of late hereditary syphilis is not illusory, but a fact of great importance, both from a practical and scientific point of view.

Perhaps some will be inclined to consider his task as somewhat superfluous, as far as English readers are concerned, inasmuch as, ever since Mr. Hutchinson drew attention to these later manifestations of hereditary syphilis, most practitioners in England fully admit their existence. While this is true, we think it is equally true that in practice, the specific origin of many cases is apt to be overlooked, and we are confident that any practitioner who reads this work will be far more on the *qui vive* for the possibility of a specific origin for many a doubtful case, and will further be in no doubt as to how to proceed to verify his suspicions.

To the specialist even, the work is likely to prove highly suggestive, and can be recommended as containing by far the most complete account of the affection yet published, together with a vast amount of original thought and observation.

M. Fournier considers we are only in the infancy of our knowledge of all that concerns the late manifestations of hereditary syphilis, but then the subject is evidently his hobby. He tells us his friends accuse him "of seeing syphilis everywhere." Bearing this in mind, and also his caution that all the facts he has so far collected are subject to revision, let us look at some of these facts a little more in detail. The first question to which M. Fournier naturally addresses himself is, how are we to recognise these late manifestations of hereditary syphilis?

In many cases the lesions present in themselves no criterion of their origin, and all that can be shown is that they occur in patients affected with hereditary syphilis. This can be elicited by a three-fold investigation—1st of the patient, for the personal signs by which the specific taint is revealed; 2nd of the parents, for evidence of syphilis in them, and especially to ascertain whether the mortality of their children has been excessive; also, whether the occurrence of miscarriages or still-births has been frequent; 3rd of the brothers and sisters of the patient, for personal signs of hereditary syphilis in them. When this enquiry can be made thoroughly, its results generally show most conclusively the presence or absence of syphilis. Unfortunately, it is often extremely difficult to carry out in practice, though it is really wonderful what can be done with a little energy and tact. With regard to the diagnostic signs revealed by the patient, it is to be noted that it is only when associated and combined that they are of value. They are not always present, or may be very vague and but slightly marked.

M. Fournier deals with them under the following headings:—(1.) Constitution, habitus, facies; (2.) Delayed, imperfect, or arrested physical development; (3.) Cranial and nasal deformities; (4.) Bone deformities on limbs and on trunk; (5.) Cicatrices on skin and mucous membranes; (6.) Ocular lesions; (7.) Auditory affections; (8.) Dental malformations; (9.) Testicular lesions; (10.) Glandular enlargements; (11.) Joint affections; (12.) Imperfect intellectual development.

The first of these are regarded as very unreliable. Imperfections of development may be summed up in the word "Infantilism," and are usually marked. Nasal and cranial deformities when present, are very typical. The value of cicatrices varies much, according to their form and position. Examination of the eyes is very important. Past interstitial keratitis is revealed by opacities and nebulæ. Fine branching residual vessels may also be discovered by direct ophthalmoscopic examination, if a high convex glass be used; and this when faint nebulæ would be overlooked. This method of diagnosis is not mentioned by M. Fournier, but we refer to it, as we have often found it very valuable. The choroid should always be examined for atrophic and pigmented patches. These we have found constantly overlooked, from their extremely peripheral position.

Deafness when primary, profound, and of sudden onset, without appreciable lesion of the auditory apparatus, is very characteristic.

M. Fournier deals with dental malformations at great length. He objects very strongly to the use of the word *Erosion*, as applied to some of these dental changes. The word implies that the tooth, originally healthy, had been acted on in some way, so as to partially destroy it, subsequent to its development. In reality, the apparent loss of substance is due to non-formation, to arrest of development during the intra-follicular life of the tooth. He maintains that syphilis is capable of producing all forms of this so-called erosion, but the "Hutchinsonian teeth" are most diagnostic. He hesitates, however, to say with Hutchinson, that they indicate nothing but syphilis. The other forms of erosion may be due, undoubtedly, to other causes, as eclampsia, but he regards syphilis as the most frequent cause, and shows that the teeth most affected, are those in process of dentification, at the epoch when hereditary syphilis is most severe, viz., the first three or four months of life.

A tabular statement shows the organs most frequently affected by hereditary syphilis. Glancing down it, one is struck with the predilection of this disease for the tissues of the eye, and accordingly we find many pages occupied with an account of ocular affections. The chapter on interstitial keratitis especially, is extremely complete and accurate. We venture, however, to differ from M. Fournier in his estimate of the age at which it is most liable to occur; he finds more cases occur under than above nine years of age. An analysis of a very large number of cases by Dr. W. R. Parker, shows a special liability between eight and twelve, much less between four and eight, and still less between twelve and sixteen. This is probably more correct. The frequent alteration in the refraction of the eye, after an attack of keratitis is over, is a feature M. Fournier omits to notice. We should have been pleased to get a little more information about the choroidal affections. We believe choroiditis is a much more frequent condition in hereditary syphilis than is generally imagined, and its relations to keratitis require further investigation.

Lesions of the osseous system come next in frequency to ocular affections, and are very fully described. They are especially the affections that are misconceived, being very commonly ascribed to scrofula, rheumatism, or traumatism. There is frequently nothing characteristic in the actual lesions, but their distribution and results as frequently give the clue to their real nature. The long bones are most affected at the ends of the diaphysis, the tibia being especially liable. Multiplicity and symmetry of the lesions may be suggestive, as is also great pain occurring before the lesion itself appears. They result in massive hyperostoses and sclerosis, modifying the form of the bone in a very characteristic manner. Suppuration and necrosis are very rare, and are always circumscribed and partial when they do occur.

Joint affections are very common and may assume three forms:—(1.) Simple hydrarthrosis, which M. Fournier believes is always secondary to bone affection. He has never seen the symmetrical synovitis without bone lesions, described by Mr. Clutton. (2.) False white swelling, so-called from its superficial resemblance to ordinary pulpy degeneration, but which really consists of epiphysial enlargement and slight synovial thickening. (3.)

Arthritis deformans, the result of excessive osteophytic formation.

We have not space to follow M. Fournier in his admirable account of the cutaneous and throat affections, merely noting that the lesions *per se* are almost impossible to diagnose from lupus, the threefold inquiry before mentioned being often the only guide to their nature. He lays it down as an axiom, that given a lesion of the velum or pharynx, it is always necessary, whatever the age, to consider the possibility of a specific cause, and especially a hereditary one.

Considerable interest attaches to the influence of hereditary syphilis on the nervous system. The offspring of syphilized parents develope slowly, physically, mentally and morally. M. Fournier believes that a large number of cerebral conditions, vaguely referred to as meningitis and encephalitis, are really due to hereditary syphilis, which is overlooked. The symptoms of cerebral hereditary syphilis generally begin with epileptiform attacks, which then either pass into permanent epilepsy, or are effaced by more complex symptoms, among these headache, intellectual defects, change of moral character, and finally, paralysis are prominent. The effects of specific treatment in these cases is often negative, unless their nature is very early recognised, being due to an indirect influence and not to a direct brain lesion of syphilis.

The knowledge of affections of the spinal cord, due to hereditary syphilis, is very slight; M. Fournier holds, however, that they probably exist, but have been overlooked.

Fibroid degenerations and gummata due to hereditary syphilis, are to be found in the lungs, producing symptoms of phthisis, and in the liver, kidney and spleen, and when their specific nature is recognised are generally readily curable.

In the final chapter of his work, M. Fournier deals with syphilis acquired in infancy, and its differential diagnosis from the hereditary form.

We cannot conclude our notice of M. Fournier's labours without a tribute of admiration for his powers of clinical observation and literary description. The cases he quotes seem almost to stand before one for inspection, and his style, which is quite colloquial, is so clear and graphic that one reads on with unflagging interest from the first page to the last.

POISONING BY ACETATE OF MORPHIA—RECOVERY AFTER TAKING FIFTEEN GRAINS OF THE SALT.

By James Macpherson, M.B., Invercargill, N.Z.

On the morning of September 8th last, a chemist in this town came to my house in a state of great mental trepidation, and informed me that a few minutes before he had taken a large quantity of acetate of morphia in mistake for pepsin. I got him into my surgery and administered subcutaneously $\frac{1}{10}$ gr. of apomorphia, and waited a few minutes. As this had no effect, I administered a mixture containing vin. ipecac. ℥j. and zinci. sulph. gr. xx. After swallowing this, the patient said "he did not feel a bit sick," and that he was afraid the morphia was acting as a sedative, and prevented him from vomiting. He said he must go to the hospital and have the stomach pump applied. I followed him thither, a short distance from my house, and fortunately, we found the Resident Surgeon, Dr. Low, in the dispensary. While he was getting the stomach pump in order, I directed the dispenser to bring me some hot water, and immediately administered to the patient a large glass beaker full, containing I should say, considerably over a quart of tepid water. This was immediately followed by profuse emesis. It was repeated about six times, till the patient said the rejected fluid was quite tasteless. As it was now evident that the stomach was quite empty, I took him back to my house. The pupils at this stage were contracted to the size of pin heads, and the patient stated that he felt a warm sensation creeping over him. I was afraid that this was the commencement of complete narcosis, so I administered a subcutaneous injection of atropine sulphate, and took him out for a brisk walk. He stumbled along with his eyes almost shut, but I kept him going, and at the end of an hour and a half he began to look more lively, and the pupils were dilating. I then took him to his own home, and had some hot and strong coffee prepared for him. After taking this, he rapidly improved and was soon out of danger. From what the patient told me afterwards, it appears that having partaken of hard boiled eggs at breakfast, he had some dyspeptic symptoms, and going to the dispensary, he took from the shelf a bottle, containing as he thought pepsine, and took from it as much as he could lift on the point of a spatula. He stirred this into some cold water, added a little tincture of cardamoms, and drank it off.

The unusual bitterness of the draught took his attention, and on looking at the bottle, he found to his horror that he had taken acetate of morphia. He hastily swallowed some vin. ipecac., and rushed off to my house. A similar quantity of morphia was found to weigh 15 grs. After carefully considering the matter, I have concluded that the poison must have been in his stomach from 18 to 20 minutes.

This case is interesting, I think, from the large amount of the drug taken, and that too at a time when we would have thought that absorption would be rapid. Possibly, the fact that digestion was arrested, had something to do with the slow absorption of the poison. Another point of interest was the difficulty with which vomiting was induced. I had been led to look on apomorphia as a certain and rapid emetic, but on the first occasion I had an opportunity of using it, it failed me.

Medical Society of Victoria.

ANNUAL MEETING.

WEDNESDAY, FEBRUARY 2ND, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. J. Williams, Allen, Daish, Fyffe, J. F. Wilkinson, A. G. Black, Bennie, Nicholls, Balls-Headley, Courtenay, Snowball, Lalor, J. W. D. Hooper, W. Moore, Hope, A. Aitchison, Meyer, Kenny, A. A. Fletcher, Workman, Joyce, Neild, J. Jackson, Iredell, J. P. Ryan, Jonasson, Duigan, Burton, G. A. Syme, Clendinnen, W. H. Owen, Barker, Hewlett, and Dowling.

The President, Dr. J. WILLIAMS, occupied the chair.

Dr. Marcel Crivelli was present as a visitor.

The minutes of the preceding meeting were read and confirmed.

Dr. WILLIAMS thanked the Society for the honour it had conferred upon him by electing him President of the Society during his absence from the colony.

The HON. SECRETARY reported that the Committee had re-elected Dr. Jamieson, Editor of the *Australian Medical Journal*; and Dr. Fred. D. Bird and Dr. W. Moore, Departmental Editors. These gentlemen thus became *ex officio* Members of the Committee. The seat in the Committee held by Dr. Jamieson as an elected member thus became vacant, and has been filled by the election of Dr. Penfold, of Sandhurst.

The Hon. Secretary also intimated that the representative of Messrs. Burroughs, Wellcome and Co. was desirous of illustrating before the Society the practical value of their Digestive Ferments and other preparations, and that probably a demonstration would be conducted by Dr. J. W. Barrett at an adjourned meeting on that day fortnight.

The Hon. Secretary notified that the names of twelve members had been removed from the Roll by the Committee, some of them having left the colony, others being in arrear with their subscriptions.

New Members.

The following gentlemen were elected Ordinary Members of the Society: Dr. William Joshua Bird, M.B. Melb., of Boort, proposed by Dr. O'Sullivan, and seconded by Dr. Kenny; Dr. George Thomas Howard, M.B. et Ch.B. Melb., of Melbourne, proposed by Dr. J. Williams, and seconded by Professor Allen; Dr. John Anderson Irwin, L.R.C.S.I., L.R.C.P. Ed., of Caulfield, proposed by Dr. Webb, and seconded by Professor Allen; and Dr. William Macansh, M.B. et C.M. Edin., M.R.C.S. Eng., of Brighton, proposed by Dr. C. S. Ryan, and seconded by Professor Allen.

Two gentlemen were nominated for election at the next monthly meeting.

Order of Business.

On the motion of Dr. Neild, it was agreed that Dr. Jonasson's paper should be taken first.

The following paper was accordingly read:—

COLOUR BLINDNESS.

By Dr. Jonasson.

The work on Colour Blindness in its Relation to Railways and the Marine, by Holmgren, the famous Professor of Physiology at the University at Upsala, has been before the scientific world for the last ten years, and the method which he proposes therein for the detection of colour blindness has been extensively adopted all over Europe and America. It has been recognised as a most reliable mode of testing colour sense by the best and most modern authors, and Nettleship recommends its use more especially for the examination of congenitally colour blind persons.

Before entering upon a description of Holmgren's *modus operandi*, I will, with your permission and for the sake of completeness, state in a very few words wherein congenital colour blindness consists, and it may be as well to mention here that the remarks I shall offer to-night apply to that form of colour blindness exclusively.

You are of course aware that most important orders are transmitted on our railways by means of colour-signals—white signifying safety, green caution, and red danger. The employé whose duty it is to obey these signals, and yet who cannot distinguish them, is liable to occasion the most fearful calamities, and the examinations made in various countries show that from 3 to 4 per cent. of the men thus employed cannot distinguish the red and green signals. With the most perfect sharpness of sight for form these men are found unable to distinguish between two colours so pronounced as bright red and pure green, the one looking to their eyes practically the same as the other. There is no actual blindness, all the coloured objects are seen, but the colours are not recognised as the normal-eyed person sees them.

The colour blind, as far as my experience goes, can always clearly perceive yellow and blue, but they are unable to detect any marked contrast between the green and red, and actually match a green with a red colour. They themselves are often ignorant of the defect, or perhaps only pretend to be so. They see coloured objects, and distinguish them by the same names that other, not colour blind, persons do, and therefore the defect cannot be ascertained by asking them to give the names of colours. This fact is the basis on which Holmgren's system rests.

The old mode of testing colour sense, by asking persons merely to name colours, has long since been proved utterly useless, and only a test, carried out on the principle that not the correct naming of the colours green and red, but their correct selection amongst a variety of other colours constitutes normal colour sense, can be satisfactory in its results. Professor Holmgren uses a collection of skeins of ordinary worsted yarn, about 150 altogether, including shades of every colour from white through the tints of the spectrum to black. With these are compared three large test skeins, one pure green, one red-purple (a mixture of red and blue), and one pure red. These colours are mingled together, and the person examined is told to select the tints resembling the test skein. He is given first the pure green test. Where the normal eye selects only the green tints, the colour blind hesitatingly picks out light or dark grey, light brown, tan-colours, light reds or pinks, as matching the green. The second test skein, red-purple, is seen by the "red blind" only as blue, and they match it only with blues (in my own experience I have found that both the "green blind" and the "red blind" select blues for red-purple), while the "green blind" select greens. The third test, the pure red skein, the colour blind match with dark browns, sages or dark olives, and they betray their defect not only by the failure to match, but also in that they overlook or reject colours which do match. Holmgren has found that the "red blind" choose shades darker than red, and the "green blind" shades lighter than red, but that both show inability to distinguish between green and red, the two important colours in land and marine signals.

It is on this system that I have, by order of the Commissioners, examined during the last two years all those employés on the Victorian Railways, whose duties absolutely require a normal perception of colour signals, comprising enginedrivers, firemen, traffic superintendents, stationmasters, guards, porters in charge, points and signal men, shunters, and others. My statistics are not complete as yet, as the examinations are not quite concluded, but if I judge the number thus examined at 2000, I think I may safely say that the estimate is rather below than above the margin.

The proportion of the absolutely colour blind I discovered amounts to fully 3 per cent., but there came also a considerable percentage of employés under my observation whom, for want of a better name, I designated colour blunt. Such persons are perfectly able to distinguish between green and red, but they greatly hesitate before doing so, and they have no conception of the difference between green and blue in broad daylight. These men were temporarily rejected by me, but they invariably succeeded in passing on a second examination, after having made themselves familiar with colours by practice.

You are, no doubt, aware that every new applicant for railway employment also has to pass the colour examination; and if I estimate the number of new men I have examined during the four years I have held office at 3000 at least, and add to it another 1000 examined by Dr. Neild and Dr. Jamieson on my behalf, I arrive at the very considerable figure of 6000 individuals in the Railway department whose colour sense has been tested in a perfectly reliable manner.

Holmgren's method has been called a very simple one, and so, no doubt, it is, and yet its application, considering the serious issues involved, both in regard to the public and the person examined, requires all the judgment, close observation and circumspection of which only a medical man is capable, if grave errors are to be avoided.

It is often very difficult to say in one examination where colour bluntness ceases and colour blindness begins. Some employés are so nervous, frightened and muddled, thinking they will be turned out of the service, that they appear to be colour blind and in reality are not, and a hasty conclusion on the part of the examiner might therefore deprive an honest, hard-working man of the means of his livelihood without any reason whatever. I have, therefore, made it a rule never to reject, absolutely, a railway employé on a first examination, however certain I may feel that he is colour blind. It is only when, on coming before me a second time, having tried in the meantime to make himself conversant with colours, he is still unable to distinguish green from red, that I give my final decision. The real difference in my opinion, between mere colour bluntness and real colour blindness is this—that the former defect is capable of correction, but that no amount of practice with colours will remove the latter.

Considering the grave responsibility which, as I have shown, attaches to these examinations, it is inexcusable on the part of some of the railway companies in England and America that they should entrust these duties to non-professional men for the sake of saving a few hundred pounds, and it is surprising that such a reckless disregard of the public safety is tolerated by these Governments.

Dr. JONASSON then demonstrated the practical application of Holmgren's test, into which he had introduced a few modifications. He had found it convenient to use three green skeins, representing not only the green of the lamp, but the fresh and faded greens of the signal flags. These were used for the purpose of testing the quickness and sharpness of colour perception, though for the detection of actual colour blindness the pure green sufficed.

Dr. JACKSON said that the Society was much indebted to Dr. Jonasson for bringing so important a subject prominently before its members. The plan adopted by Dr. Jonasson was the best and simplest. The principle underlying the "Confusion Test," was admitted by excellent authorities. He could himself bear testimony to the rapid and effective manner in which Dr. Jonasson conducted his examinations. Congenital colour blindness had nothing to do with acquired colour blindness, in which the sense of colour is lost, *pari passu*, with that of sight. It affected the whole field of vision, and thus was sharply distinguished from the central red scotoma of tobacco amaurosis. In London he had often seen the confusion test employed, especially by Mr. Nettleship, who spoke of it as the best method. Other tests were more elaborate, but this was simple, and in the hands of an expert like Dr. Jonasson, it was the most valid and useful.

Dr. Neild remarked that he could add little to what Dr. Jonasson had said. He had examined about 500 candidates for employment in the railway service, and his results agreed with those of Dr. Jonasson. He had been impressed with the frequency of what Dr. Jonasson happily termed, "colour bluntness." It was, in his opinion, due to defective education. Candidates could often recognise colours, but called them by extraordinary names. In especial, purple was generally called pink, or puce, or violet, seldom by its right name. He did not believe that even in the State Schools children were taught the names of colours. In the examinations conducted by him, the percentage of the colour blind was less than three, but that of the colour blunt was much higher. But the colour blunt went away and practised colour reading, and in a few weeks became able to distinguish colours with ease. The truly colour blind could never acquire such facility. He was glad that Dr. Jonasson had brought the matter before the Society. While he would not for a moment depreciate the complicated and costly apparatus which was sometimes used, the Holmgren method was so simple and so effective, that he was fully satisfied with it.

The President, Dr. J. Williams, said that great interest attached to Dr. Jonasson's paper. The method of testing was very simple, and if it were as reliable as it appeared to be, it must be most valuable. Doubtless many members would now pay more attention to the subject.

Dr. Jonasson, in reply, expressed his thanks for the attentive hearing which members had accorded to him. The character of the discussion sufficed to prove the absurdity of the contention that a special oculist was required for the detection of colour blindness. The other assertion, that every examination concerning acuteness of vision for railway purposes should be entrusted to an oculist, was equally untenable. If any candidate was willing to see as well as he could, any medical man could test his powers of vision by Jäger's or Snellen's types. Occasionally men pretended to be blind, then the services of an oculist were necessary, and were readily provided by the Railway Department. Many impracticable proposals had been made for testing the colour sense of employés in the marine service. At the Medical Congress in London it was agreed that nothing effectual could be done without some international agreement. Holmgren remarks, that the test examination should be held at schools, and certificates should there be given of normal colour sense; and no captain or railway company should engage employés who have not such certificates. Dr. Jonasson, in concluding, again thanked the members present for their kind attention.

The following paper was then read :—

INTUS-SUSCEPTION—LAPAROTOMY.

By W. Snowball, M.B. &c.

Honorary Surgeon to the Children's Hospital.

H. B., male, æt. 8 months. At the breast. The child was first seen by Dr. Workman on the 4th of September, 1886. It had then been ill some few hours, with vomiting of bile, and violent straining and passing of fluid blood by the anus. No fæces. Dr. Workman diagnosed intus-susception, and put the child on small doses of opium and belladonna, at the same time, telling the parents that if speedy relief did not take place, operation was the only chance for its life. On the morning of the 5th, I saw the child with Dr. Workman, and found it still vomiting and straining violently; a small sausage shaped swelling in right hypochondriac region; rectal examination disclosed nothing. There was almost complete suppression of urine. The child was given chloroform, a large enema, and massage, and with no good result. It was therefore decided to perform laparotomy. Dr. Hewlett gave chloroform, and assisted by Dr. Workman, I opened the abdomen in the mid-line, and after some little difficulty, found that the obstruction was situated in the ileum, above the ilio-cæcal valve. The impaction was so very tight, that considerable force had to be used in returning the gut to its normal condition. The peritonæum was thoroughly cleansed with dry sponges, and the wound closed with silver wire, and dressed with dry absorbent wool. The child laid on a pillow; ordered a teaspoonful of breast milk every half hour, and ice put into the mouth frequently. At 10 o'clock that evening was free from pain; had no tympany; temperature 99°.

Sept. 6.—In the morning; had a quiet night; had passed water freely; no flatus, and no fæces.

Sept. 7.—Bowels freely moved; temperature 99·5°; pulse 120.

Sept. 8.—In the afternoon, child seemed much worse; abdomen tender and tympanitic; eyes yellow; vomited frequently; pulse 130; respiration 70, and very shallow; temperature 102°. Given a grain of calomel, to be followed an hour after by 5 grs. of sod. sulph.

Sept. 9.—Bowels moved freely through the night, and peritonitic symptoms all gone.

Sept. 10.—Stitches removed; all healed except the one at the lower angle of wound, on removing which there escaped a teaspoonful of healthy-looking, but foul smelling pus. The part kept clean with a little Condy, and by Sept. 14, the wound was completely healed.

There were one or two points of interest in the case. 1st.—The extreme youth of patient, viz., eight months. 2nd.—The stoppage of urinary secretion, which as Treeves points out, is indication of obstruction in small intestines. The extreme tightness of the obstruction, which proved how impossible it would have been for any *vis a tergo*, in the shape of a watery enema, or inflation with air, to reduce the impaction. All through the case the child took an occasional small dose of belladonna and opium, till the supervention of peritonitic symptoms, when a drastic purge was given, in hope that the free watery secretions from the gut would most quickly relieve the symptoms.

Dr. Workman said that the paper read by Dr. Snowball was an interesting contribution to medical literature. Among recent authorities some recommend early laparotomy in cases of acute intus-susception, when injections and other ordinary measures give no relief; while some surgeons incline to trust longer to nature's own processes. Just as with herniotomy, however, the general tendency is towards early operation, before the chances of success are removed by continued manipulation and inflammation. In the present instance there was a well-marked tumour on the right side of the abdomen, and its shape showed that reduction was impossible. Dr. Snowball performed an excellent operation. The intestines were injected, but there was no sticky effusion whatever—no real peritonitis. The only subsequent complication consisted in the little collection of matter which formed below and between the muscles, owing to the cutaneous wound being united somewhat too closely. He had seen the patient to-day; he was quite well, though there was a little tendency to bulging in the line of the incision.

Dr. BALLS-HEADLEY congratulated Dr. Snowball on the success of his operation. The first point in every case of laparotomy lay in the exactness of the preliminary diagnosis. In this case, fortunately, Dr. Workman, who was attending the child, had accurately diagnosed the condition from the first, and called to his assistance Dr. Snowball, as a specialist in children's diseases. Delay would have involved great danger. Early laparotomy, performed with every precaution, with absolute cleanliness, and with special care not to bruise the peritonæum, was not in his opinion a dangerous operation; and may be done with perfect propriety as an exploratory measure. He did not believe in the necessity of rigid antiseptic treatment. An interesting feature in the case was the threatening of jaundice, which is not uncommon after laparotomy, and which must be carefully distinguished from a result of peritonitis. In his own case of Porro's operation, the patient on the third day became yellow; and a case of ovariotomy, just performed, also had threatenings of jaundice. But a dose of calomel, 10, 15, or 20 grains, followed by sulphate of magnesia, soon sends the jaundice away.

Dr. J. P. RYAN referred to the great extension in the use of laparotomy during recent years, both as an exploratory and as a curative measure. The danger attending the operation had been largely removed by the delicacy with which it was performed, and the precautions which were taken by special antiseptic measures, or by perfect cleanliness. He held that in the very early stage of peritonitis a purgative, such as sulphate of magnesia, might cut short the disease, although, except in the very outset of the inflammation, it would certainly do harm.

The following paper was then read:—

TWO CASES OF IRREGULAR DELIVERY.

By Felix Meyer, M.B., Ch. B.

Case I.—*Puerperal Eclampsia.*

On the 27th July last, at two in the afternoon, I was called to see a poor woman in the neighbourhood. I found her unconscious, with facial twitchings and general restlessness, in other words, at the outset of an eclampsic attack. She was about eight months pregnant with her first child. The cs was rigid and about the size of a crown.

There was no one in the house but her husband, who had left her to call me. I could get no history of the attack. I drew off the urine which contained 30 per cent. of albumen. Under the circumstances, I advised her immediate removal to the hospital (Women's) which was quite near. To this the husband demurred, as he expected his mother, a nurse, hourly. I waited half an hour with little change in the patient, labour meanwhile progressing. I left her to get chloroform, forceps, &c., and on my return found her in a strong fit—typical puerperal convulsions. The head was on the perinæum, so I at once gave her a few whiffs of chloroform, and with no trouble delivered her with Aveling's short forceps of a stillborn, eight months' male. Ten minutes after I expressed the placenta.

From this on (4.40 p.m.), convulsions set in, strong and frequent, the tonic spasms lasting fully a minute. The pupils were sensible to the stimulus of light, and the conjunctivæ between the fits sensitive to touch. I contented myself with watching her, seeing her many times till midnight, when the fits seemed to have reached their maximum intensity.

I left her for the night in charge of an experienced Lying-in-Hospital nurse, who saw that she did not injure herself. She had a number of fits during the night, but was quieter in the morning, and the urine was clearer. Though still unconscious, she swallowed milk put in her mouth. She became quite quiet that night, was conscious early next forenoon, and made a rapid uncomplicated recovery.

The feature of the case is the *natural* subsidence of the nervous and vascular excitement to a safe normality. In a residence of over four years at the Melbourne Lying-in-Hospital, I have in the case of full-blooded, almost cyanosed, eclamptic women, frequently, and with success, employed venesection to the extent of from 20 to 30 ounces of blood; in other cases, the injection of morphia and chloroform have had beneficial results. Here, however, no one fit seemed to threaten life, and so I felt justified in leaving the patient to nature.

CASE II.—*Obstruction to Labour from Cicatricial Band across the Os Uteri—Spontaneous Partial Rupture of the Uterus—Incision—Recovery.*

Mrs. L., the mother of several children, the youngest being seven, underwent Emmet's operation in October 1885, and soon after became pregnant.

I was sent for at 10 p.m., on the 18th September last, and found her with strong labour pains, chiefly in the back. With some difficulty I made out a hard rigid cervix, very high up posteriorly, and in size not larger than a fourpenny piece. I ordered chloral hydrat. gr. xx. On my return before midnight the pains were much stronger and of a bearing down nature. The os had not increased anything in size. I could just get the tip of the fore finger in it, and could feel between the margin and the child's head an adventitious tough membrane, which appeared to me a cicatricial band. I swept the finger round and round with a view to dilate the os, but the enlargement thus effected was trifling, the rim of the os being so tough and resisting.

Any doubt as to the proper course of action was almost immediately removed; for, an unusually strong pain coming on, I was alarmed at finding a tear commencing in the uterus some two inches above the rigid margin of the os, accompanied by a sharp gush of blood. It was a laceration completely through the wall of the uterus, and there was nothing between the finger and the child's head. I at once poured some chloroform on to the inhaler, and handing it to the nurse, I slipped a blunt pointed curved bistoury through the os, using the right index finger as a director, and slit up the cervix to the lower margin of the laceration, which was extending upwards towards the fundus, the uterus all the while contracting strongly on the head, and driving it perversely upwards in the line of the least resistance. The hæmorrhage was considerable from the cervical vessels. I had now a fairly large aperture for the passage of the head, but there was an annoying tendency on its part to drive upwards and increase the rent to the fundus; and I had to support the head with two fingers high up against the tense uterine wall, much as one supports the perinæum. With the action of the chloroform the pains were regulated to the requisite force, and at 2.30 a.m. the child was born—a full-sized female. Great hæmorrhage accompanied the birth of the placenta some twelve minutes later.

I stayed a couple of hours, and when I left the patient she had all the signs of a good reaction. I ordered ext. ergot. liquid ʒ j., liq. opii. sed. (Battley) m xxv., and left the uterus distended with a large clot (in this case a safe controller of hæmorrhage) which I expressed six hours after.

She remained anæmic and weak for a few days, but made a good recovery, with scarcely any rise of temperature. On examining the os on the twelfth day the laceration had healed completely to the margin.

It seldom falls to the lot of the accoucheur to detect with the finger the actual rupture of a uterine wall. Barnes' *Obstetric Medicine and Surgery*, vol. ii., p. 531, points out the value of the timely use of the bistoury—the only treatment applicable to this case.

This is the second labour that has come under my personal notice, in which the subject had had Emmet's operation performed by another surgeon. In the first case labour was natural, the os dilating slowly and steadily.

Dr. Balls-Headley said that the cases described by Dr. Meyer were very interesting, and that the latter one, in which labour occurred after Emmet's operation, was specially worthy of record. In performing that operation discretion may be usefully employed in determining the future size of the os uteri. If the os be made small, pregnancy is unlikely to follow; but if it does occur, the condition is practically that of the pin-hole os. But the difficulty in labour may be removed by the introduction of a small sponge-tent. In Dr. Meyer's case, the difficulty in the early stage of labour had already caused the uterus to split, and therefore it was necessary that he should adopt the measures which were employed so successfully. As a rule, when Emmet's operation has been well done, the os will not split again in a subsequent confinement, or only to a slight and easily remediable extent.

Dr. Meyer, in reply, said that dilatation by a sponge-tent was out of the question by the time that he first saw the patient. The only possible procedure was to divide the rigid tissues of the os, and thus prevent the laceration from extending upwards.

At the close of the Ordinary Meeting a Special Meeting was held, in connection with ethical business of the Society.

The consideration of the items remaining on the notice paper was adjourned.

ROLL OF MEMBERS.

The following is the roll of members up to the present date. Asterisks are placed before the names of those who have been Presidents :

LIFE MEMBERS.

*Bowen, Thomas Aubrey, L.K. et Q.C.P.I., M.R.C.S. Eng.
Bird, Frederick Dougan, M.B. et Ch. M. Melb., M.R.C.S. Eng.
*Bird, Samuel Dougan, M.D. St. A. et Melb., L.R.C.P. Lond., M.R.C.S. Eng., L.S.A. Lond.
Burke, Stephen John, M.R.C.S. Eng., L.K.Q.C.P.I.
*Fetherston, Gerald Henry, M.D. Melb., L.R.C.P. Ed., L.F.P.S.G., L.A.H.D.
*Fitzgerald, Thomas Naghten, F.R.C.S.I.
*Haig, William, M.D. Maryland (U.S.)
*Hewlett, Thomas, M.R.C.S. Eng., L.S.A. Lond.
*Moloney, Patrick, M.B. Melb.
*Neild, James Edward, M.D. et Ch. B. Melb., L.S.A. Lond.
Webb, John Holden, M.R.C.S. Eng., L.R.C.P. Lond.

ORDINARY MEMBERS.

A'Beckett, William Goldsmid, M.R.C.S. Eng., L.S.A. Lond.
Adam, George Rothwell Wilson, M.B. et Ch. M. Ed.
Aitchison, Alexander Smith, M.B. et Ch. B. Melb.
Aitchison, Roderick, M.A., M.B. et Ch. B. Melb.
Allen, Harry Brookes, M.D. et Ch. B. Melb.
Alsop, Thomas Osmond Fabian, M.B. et Ch. M. et L.M. Ed., M.R.C.S. Eng.
Annand, George, M.D. et Ch. B. Melb., M.R.C.S. Eng., L. et L.M. R.C.P. et S. Ed.
Armstrong, William, M.D. et Ch. B. Melb.
Backhouse, John Burder, M.B. et Ch. B. Melb.
Bage, Charles, M.D. et Ch. B. Melb.
Balls-Headley, Walter, M.D. et Ch. M. Cant., M.D. Melb., M.R.C.P. Lond.
Barker, William, M.R.C.S. Eng.
Barrett, James, M.D. Syd., M.R.C.S. Eng., L.S.A. Lond.

Barrett, James William, M.B. et Ch. B. Melb., M.R.C.S. Eng.
Bennie, Peter Bruce, M.A., M.D. et Ch. B. Melb.
Black, Archibald Grant, M.B. et Ch. M. Glas.
Brett, John Talbot, M.R.C.S. Eng., L.R.C.P. Lond.
Burton, William Henry, M.D. Toronto, M.R.C.S. Eng., L.R.C.P. Lond.
Campbell, James, M.D. et Ch. M. McGill Univ. Montreal.
Clendinnen, Frederick John, L. et L. M.R.C.P. et S. Ed., L. et L. M.K.Q.C.P.I., L.R.C.P. Lond., M.D. et D. Ch. Brux.
Cooke, John, M.R.C.S. Eng., L.S.A. Lond.
Courtenay, John Hoyested, L. et. M. et L. M.K.Q.C.P.I., L.R.C.S.I., L.R.C.P. Lond.
Cox, James, M.D. Melb., M.R.C.S. Eng.
*Cutts, William Henry, M.D. Ed. et Melb., L.S.A. Lond.
Daish, William Christian, M.B. et Ch. B. Melb.
Davenport, Arthur Frederick, M.B. Lond., M.R.C.S. Eng.
Davies, Thomas Sidney, L. et L. M.R.C.P. Ed., L.R.C.S. Ed., L.F.P.S.G.
Dickinson, George Dixon, M.R.C.S. Eng., M.B. et Ch. M. Ed.
Dowling, Francis Joseph, M.R.C.S. Eng., L.S.A. Lond., M.B. Lond.
Doyle, Patrick, M.D. et Ch. M. Q.P.I., M.D. N.Z. et Melb.
Duigan, Charles Beamish, L.R.C.P. et S. Ed.
Duncan, Robert Byron, F. et L.M. F.P.S.G., L.S.A. Lond.
Dunn, Robert Henry, M.R.C.S. Eng.
Duret, Charles, M.D. Paris.
Elsner, Frederick William, L.K.Q.C.P.I., L. et F.R.C.S.I.
Embling, William Henry, L.F.P.S.G., L.R.C.P. Lond.
Embling, Herbert Augustus, L. et L. Mid. R.C.P. Ed., L. et L. Mid. F.P.S.G.
Finlay, William, M.D. San Francisco.
Fishbourne, John William Yorke, M.B. et Ch. M. Dub.
Fisher, Alexander, L.R.C.S. Ed.
Fleetwood, Thomas Falkner, M.A. Dub. et Melb., M.B. Dub., F.R.C.S.I.
Fletcher, Arthur Augustus, M.B. et Ch. B. Melb.
Fletcher, Edward, M.R.C.S. Eng.
Florance, James William, M.D. et Ch. B. Melb.
*Ford, Frederick Thomas West, M.R.C.S. Eng.
Foster, Thomas, M.R.C.S. Eng.
Fyffe, Benjamin, M.R.C.S. Eng., L.R.C.P. Lond.
*Girdlestone, Tharp Mountain, F.R.C.S. Eng.

Goldie, James Joseph, L.R.C.S. Ed.
*Graham, George, M.D. Melb., M.R.C.S. Eng.
Graham, George Moore, L.K.Q.C.P.I.
*Gray, Andrew Sexton, M.R.C.S. Eng.
Gray, Charles Edward, M.D. et M. Ch. T.C.D.
Griffith, James de Burgh, M.B. et Ch. M. Dub.
Haley, Frank, M.B. et Ch. B. Melb.
Harricks, Francis Meagher, L.R.C.S.I., L. et L.M.K.Q.C.P.I.
Heffernan, Edward Bonaventure, M.D. et Ch. B. Melb.
Henderson, Arthur Vincent, M.B. et Ch. B. Melb.
Hinchcliff, Edwin, M.D. Ed. et Melb., M.R.C.S. Eng.
Honman, Andrew, M.R.C.S. Eng., L.S.A. Lond.
Hooper, Francis Leopold, M.R.C.S. Eng., L.S.A.
Hooper, John William Dunbar, L.R.C.P. et S. Ed.
Hope, Thomas, M.B., C.M. Edin.
Hora, Tudor, M.R.C.S. Eng., L. et L.M. F.P.S.G., L.S.A.
Horne, George, M.A. M.B., Ch. B. Melb.
Hudson, Robert Fawell, L.F.P.S.G., M.D. St. A. et Melb.
Hutchinson, Benjamin Clay, M.D. Edin. et Melb.
Iredell, Charles Lesingham Maynard, L. et L.M.R.C.P. Ed., M.R.C.S. Eng., L.S.A.
Jackson, James, M.D. Lond. et Melb., M.R.C.S. Eng.
*James, Edwin Matthews, M.R.C.S. Eng., L.S.A. Lond.
James, Henry, M.R.C.S. Eng.
*Jamieson, James, M.D. Glas. et Melb., Ch. M. Glas.
Jermyn, David, L.R.C.S.I.
Johnston, John, M.B. et Ch. M. Glas.
Johnston, James Couper, M.B. et Ch. M. Ed.
*Jonasson, Hermann, M.D. Wurz. et Melb.
Joske, Alexander Sydney, M.B. et Ch. B. Melb.
Joyce, John Fuller, L.R.C.S. Ed., L.R.C.P. Ed.
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McLean, Hector Rath, M.B. et Ch. M. Edin.

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Miller, Hubert Lindsay, L. et L.M.R.C.P. et S. Ed., M.D. et Ch. et Mid. Brux.

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Montgomery, John Park, M.B. Ch. B. Melb.

Moore, William, M.D. Ch. M., Melb.

Morrison, Alexander, L. et L.M.R.C.P. et S. Ed.

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Nickoll, John Sayer, M.R.C.S. Eng., L.S.A. Lond.

Noyes, Alfred William Finch, M.R.C.S. Eng.

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O'Brien, John Aloysius, M.B. et Ch. M. Glas.

O'Sullivan, Michael Ulich, L. et L.M.R.C.P. et S. Ed.

Owen, Frederic James, M.D. et Ch. B. Melb.

Owen, William Hall, L. et L.M., K.Q.C.P.I.

Peipers, Friedrich, M.D. Berlin.

Penfold, Oliver, M.R.C.S. Eng., L.S.A. Lond.

Pettigrew, Augustus Joseph Walford, M.R.C.S. Eng., L.S.A. Lond.

Pincott, Rupert, M.R.C.S. Eng., L.S.A. Lond.

Porter, Charles Frederic, M.R.C.S. Eng., L.K.Q.C.P.I.

Power Richard, L.R.C.P. Ed., L.R.C.S.I.

Reid, George More, M.D. Edin., M.R.C.S. Eng., L.R.C.P. Lond.

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Robertson, James Alexander, M.B. et. C.M. Glasg.
Robinson, Leonard, M.D. et Ch. M. Roy. Univ. Ire.
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Ryan, Martin Joseph, M.B. et. Ch. B. Melb.
Ryan, Timothy Bernard, M.B. et Ch. B. Melb.
Schlesinger, Richard Emil, M.R.C.S. Eng., M.B. et Ch. M. Edin.
Shields, Andrew, M.D. Ed.
Shields, Charles James, M.B. et Ch. B. Melb., M.R.C.S. Eng.
Shuter, Charles Galdwyn, M.B. Durham et. Melb., M.R.C.S. Eng.
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Smith, Stephen Maberley, M.R.C.S. Eng., L. et L.M.R.C.P. Ed.
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Tremearne, John, M.R.C.S. Eng.
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Williams, John, M.D. Ed. et Melb., M.R.C.S. Eng.
Willis, Rupert Henry, M.B. et Ch. B. Melb.
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Woinarski, Gustave Henry Zichy, M.B. et Ch. B. Melb.
Woinarski, Stanislaus Emil Antony Zichy, M.B. et Ch. B. Melb.
Wood, Arthur Jeffreys, M.B. et. Ch. B. Melb.

Wood, William Atkinson, M.B. et. Ch. B. Melb.
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HONORARY MEMBERS.

Archer, William Henry, formerly Registrar-General of Victoria.
Barnes, Robert, M.D., F.R.C.P. Lond., &c., Ex-Pres. Obstetrical Society of London.
Black, Thomas, M.D.
Bosisto, Joseph, Ex-President Pharmaceutical Society of Victoria.
Campbell, William Henry, M.R.C.S. Eng.
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Ellery, Robert L. J., F.R.S. Government Astronomer of Victoria, President of the Royal Society of Victoria.
Ralph, Thomas Shearman, M.R.C.S. Eng., L.S.A. Lond., President of the Microscopical Society of Victoria.
Stuart, Thomas Peter Anderson, M.D. et. C.M. Edin., Professor of Anatomy and Physiology in the University of Sydney.
Von Müeller, Baron Sir Ferdinand, F.R.S., K.C.M.G., Ph. D. &c., &c., Government Botanist of Victoria.

At the meeting of the City Council on the 31st ult., it was unanimously agreed to increase the salary of the Health Officer, Dr. Jamieson, to £400 annually. Testimony was borne by the Chairman of the Health Committee and other members of the Council to the excellent work done by Dr. Jamieson, and it was also stated by the Mayor that provision would soon have to be made for more efficient sanitary inspection of the City.

British Medical Association.

VICTORIAN BRANCH.

ORDINARY MONTHLY MEETING.

WEDNESDAY, JANUARY 26th, 1887.
(Hall of the Royal Society.)

The President, Dr. WILLMOTT, in the chair.

The following paper was read:

ON COLOUR BLINDNESS AND OTHER DEFECTS OF SIGHT.

By J. T. RUDALL, F.R.C.S.

On repeated occasions since the adoption by the International Medical Congress of 1881, of the "Resolutions as to Tests of Sight," it has been my endeavour, as well as my duty, to bring this subject under the notice of the Government, the profession, and the public of this colony—so far, unfortunately, without practical effect. It does seem strange that a Legislature should make laws prohibiting the sale of a child's penny-worth of fruit or sweetmeats, or a glass of gingerbeer, and cause infractions of such trumpery measures to be ferreted out by policemen, and yet utterly neglect every attempt to frame a law preventing a half-blind person from driving a railway train or navigating a ship, thus endangering the lives, it may be, of hundreds of human beings. Just now it seems as if we were quite as likely to hear of a law "fining citizens for blowing their noses without a permit" (*vide The Argus* of January 20) as to have any sensible and effective legislation to prevent our lives being needlessly placed in jeopardy at any moment on board a steamship or in a railway train. Neither the Government, nor the Railway Commissioners, nor the Steam Navigation Board have been, nor does it seem can be, moved to take measures to ensure the public safety in travelling. My own attention has lately been recalled to this matter by a paper which Dr. B. Joy Jeffries, of Boston, has been so good as to send to me. In America, this important subject has not been so entirely ignored as in our colony, but Dr. Joy Jeffries contends and complains that in his own state, at any rate, the legislation has been, as he expected it would be, almost inoperative. In the Massachusetts statutes, there is a law forbidding any railway company, under certain monetary penalties, to "employ, or keep employed, any person required to distinguish form or colour, unless such person has been examined for colour blindness or other defective sight, and has received a certificate that he is not disqualified for such position by colour blindness or other defective sight." But as the degree of "colour blindness" or defective sight which disqualifies is not specified, and as the competency of the examiner is left equally undetermined, the whole law practically falls to the ground. In one of my communications (which appeared in *The Argus*, December 7, 1882), I expressed my belief that there were at that time persons employed on our railways whose visual defects rendered them incompetent for the proper performance of their duties, and my own experience has verified the correctness of that view, for I have since then, personally examined colour blind engine-drivers and others. Unless my judgment errs, I may with equal truth repeat the statement now in 1887. Dr. Joy Jeffries gives in his paper a number of instances which he has examined, in which the perception of form, by reason of hyperopia or other defect, varied from one-sixtieth to one-half the normal, and others where the colour-blindness, was complete or considerable. These persons were actually employed on the American railways. On the other hand, he also examined persons whose slight ametropia, or whose small diminution of colour sense, in no way disqualified them for the duties required, and who, nevertheless, were refused employment. All these dangers and injustices would be prevented by a law compelling the adoption of the tests passed by the International Medical Congress, and ensuring their being applied by competent examiners. To quote the words of Dr. Joy Jeffries, with which I agree, "Standard requirements and competent expert examiners can alone ensure honesty and fairness to all concerned."

Dr. NEILD pointed out that the Victorian Railway Commissioners had for some time insisted upon candidates in that department being examined for colour sense. He himself had examined about 450 persons in this way, and had found that about 3 per cent. were absolutely colour blind, and about 4 per cent. more colour dull or blunt, this latter condition being in his opinion, the result of defective education.

Dr. JACKSON had noticed that in London, the simpler method of Holmgren's was preferred, and he quite concurred with this preference. The institution of this test did not render necessary an exact knowledge of ophthalmology. The study of eye disease was quite unconnected with colour blindness.

Dr. **Jamieson** thought the Government of Victoria were in advance of other countries in insisting that the test should be applied by medical men, and in insisting that all candidates for railway employment should be subjected to it. The same test, however, should be insisted upon in the case of marine employés. From all that he had seen, the coloured thread test appeared to be quite reliable, for it asked quite enough and did not ask too much. The matching of the colours, however, was the main point to be looked to, the mere mentioning of the names of the colours being valueless as a test. The test, moreover, could be efficiently used in the detection of malingering; for the impostor did too much, while the genuinely colour blind man went about his work in quite a different fashion. No doubt it required some experience and practice to employ the test properly, but when carefully and systematically conducted, the coloured thread examination was sufficient both for discovering colour blindness, and for detecting imposture. He referred to Dr. Jonasson's employment of this test, and mentioned that though he (Dr. Jonasson) had been engaged in the duty of examining new candidates since 1882, he had only recently completed the examination of employés who had been in the service anterior to that date, and had found some of them to be quite colour blind.

Dr. **Shields** in 1881 had had Mr. Rudall's report, which was furnished to the Government, referred to him, and he had then urged upon the Government that Mr. Rudall's suggestions should be carried out. The then Minister of Railways admitted the importance of the subject, and had promised to further their adoption. Before Dr. Jonasson had been appointed to make the examinations, both he (Dr. Shields) and Dr. M'Crea had instituted the colour test with glasses, but this method he had found was not reliable, and he was not surprised to learn that some of the employés so tested had been subsequently discovered to be defective in colour sense. In any examination that he conducted now, he used Holmgren's test.

Mr. **Rudall**, in reply, had again to insist upon the necessity of determining the exact degree of colour sense defect, so as to be able to determine how much of defect should disqualify. No examiner should be left to determine this by other than exact methods. The Medical Congress of 1881 agreed upon the imperativeness of the exact method. Moreover, such an examination should be made as to exclude all possible eye disease. The matching of the colours was no doubt good, as far as it went, but it did not go far enough; and moreover, it took up too much time. He (Mr. Rudall) adopted the confusion tests, the test of flags, disks, and coloured lights. As to Dr. Jamieson's statement that the Victorian Government was in advance of other Governments, this was not absolutely true even of the railways; besides, as they issued no definite instructions, the tests were insufficient. The whole contention of his paper was that there should be definite instructions to those who conduct the examinations, and examiners should be experts. Dr. Shields' remarks had strengthened his case that the examination generally made was not sufficient.

A conversational discussion followed, in which Mr. Rudall stated that he had detected colour blindness in a draper, whose business assumed the possession of exact skill in colour recognition.

Dr. Graham then read for the author, the following paper :—

OVARIOTOMY—RECOVERY.

By Robert Denham Pinnock, M.B. Ch. M., of Ballarat.

The patient, Mrs. H., aged 67, a small spare woman, was first seen by me on the 17th of August, last year, for an attack of acute peritonitis, and the tumour was then discovered. The peritonitis had apparently been set up by a blow on the abdomen from the handle of her mangle. As soon as the inflammatory symptoms had subsided, viz., 21st of August, I aspirated the tumour, and drew off 144 ounces of viscid reddish-brown fluid, of sp. gr. 1030; neutral reaction; containing much albumen. Under the microscope, the fluid showed a quantity of cholesterine crystals and numerous granular cells without nuclei (Drysdale's cells), also red corpuscles. The tumour receded very slightly after tapping, giving rise to the suspicion—afterwards verified—that extensive adhesions existed.

The present enlargement was first noticed two years ago, sometimes in one flank and sometimes in another, but she only observed the abdomen enlarge in front about three months before the attack of peritonitis. She never suffered pain, and was at work up to the date of the peritonitis. Heart, lungs, and liver healthy; urine, pale amber, slight flocculent precipitation, sp. gr. 1010, acid, no albumen.

After the tapping on the 21st of August, she was fed up and given tonics, and not allowed to work.

On the 20th of September, the cyst having filled up again, I operated at 4 p.m. in our private hospital, Dr. Eastwood administering bichloride of methylene, and Drs. Hudson, Ochiltree, and Salmon, kindly assisting. Median incision, four inches long, between umbilicus and pubes. Almost the whole surface of the tumour was adherent to omentum, intestines, bladder, and brim of pelvis. Some of the adhesions, being recent, were broken down without much difficulty. Others were so firm that great care and patience were required to separate them. But by sacrificing the outer coat of the sac wall in some places, cutting between double ligatures in others, and using the thermo-cautery where required, the cyst was eventually removed, after emptying it with a Wells trocar. The pedicle was secured with strong carbolised hemp, and dropped into the abdomen; it gave no trouble, being long and thin; it sprung from the left broad ligament. I endeavoured to examine the right ovary, but could not find it.

After carefully cleansing the abdominal cavity and intestines, and checking all oozing, the peritoneal incision was secured by a continuous over and under suture of fine carbolised gut, and the abdominal incision by five deep sutures of carbolised hemp, and a few intermediate superficial ones of carbolised silk. The operation was not performed under the actual carbolic spray, but a steam spray was playing in the room before and during the operation. The wound, having been well dusted with iodoform, was covered with a dry strip of Boric lint, and over this a pad of salicylic wool, the whole being secured by a broad bandage of soft flannel. The tumour was unilocular, and with its contents weighed rather over nine pounds. Owing to the trouble with the adhesions, she was not in bed until 5.30 p.m., one hour and a half after being anæsthetised, and was then suffering greatly from shock; the pulse being 60, very weak and small; temp. 94°. Surface and extremities quite cold, and respiration shallow. A self-retaining catheter was left in the bladder. She was wrapped in hot blankets and hot bottles applied to every available part. Small quantities of hot brandy and water given frequently, and strong ammonia to nostrils, until she gradually rallied, and by 9.30 p.m. the pulse was 92, regular and firm; temp. 98·6°.

The progress of the case was almost uninterruptedly favourable, the highest temperature recorded being 99·3°.

Hospital Reports.

MELBOURNE HOSPITAL.

Wound of Buttock, Perforating the Rectum.

Under the care of Mr. FITZ GERALD.

Joseph G., æt. 25, labourer, was admitted into the hospital on the 30th September, 1886. On the previous day the head of a crowbar was blown into the left buttock by an explosion of blasting powder. The force of the blow knocked him down. There was a good deal of bleeding from the wound at the time. On admission there was found to be a deep, ragged, gaping wound, about 3 inches in length, situated in the left gluteal region, below and anterior to the posterior superior spine of the ilium. The wound reached the bone and was full of blood clots. These clots were cleared out, the wound well syringed with carbolic lotion, and a drainage tube inserted. The patient was in great pain.

Oct. 2.—Temperature 100° F. this morning. The bowels are confined, and as yet no trace of fæcal matter is apparent in the discharge from the wound, which is gaping very much. Much sloughed tissue is coming away. A strong mercurial purge was ordered.

Oct. 4.—Temperature 103°. Bowels open. Wound suppurating freely. Charcoal poultices applied.

Oct. 5.—Under chloroform two small pieces of bone were removed from the bottom of the wound. Six p.m.—Temperature 104°. No rigors. 10 grs. of quinine ordered.

Oct. 6.—Wound decidedly better; to be stuffed with elemi and turpentine ointment.

Oct. 7.—The discharge issues from the wound in increased quantity on straining.

Oct 12.—Owing to some bagging of matter the whole gluteal region is firmly strapped.

Oct. 13.—The discharge is now mixed with much fæcal matter, the quantity of which is much increased on the patient bearing down.

Oct. 14.—A finger introduced into the wound can be felt from the rectum. On careful examination a fracture of the sacrum is diagnosed. A fragment of bone, presumably the posterior inferior spine of the ilium, is carefully removed. In order to allow of the free exit of the fæces the sphincter ani is forcibly dilated; any attempt, however, to syringe out the rectum is followed by the escape of fæces from the wound. The patient is much prostrated.

Oct. 15.—Fæces do not pass through the wound so easily now. Patient regaining strength.

Oct. 26.—No fæcal matter has passed through the wound for some days.

Oct. 27.—Patient is heavy and complains of headache.

Oct. 28.—Patient suddenly delirious. Temperature 103° at night. Rectum loaded. Purge ordered; also sodæ salicylat. gr. xx. every three hours.

Oct. 29.—Bowels opened freely. Patient much better. Fæces coming freely through the wound.

From this date the bowels were kept well open, and the wound slowly closed with no constitutional disturbance, so that by the 12th of November there was very little discharge and no further appearance of fæces in the wound. The ultimate cure was in some degree retarded by a periostitis of limited extent occurring on the posterior surface of the sacrum. The patient was discharged cured on December 7th.

There was much worthy of notice in this case. The non-implication of the peritoneum by the injury; the non-occurrence of secondary hæmorrhage, although the wound leading to the splintered bone must have been in close proximity to the gluteal artery and its branches, and was the seat of much sloughing; the great care necessary in removing the sharp fragments from the wound; the importance of allowing the freest exit possible for fæces by nullifying the action of the sphincter, and by rendering the motions soft by appropriate medicines; and the stimulation of the wound by turpentine and elemi ointment, in order to hasten the separation of fragments of bone from the deep parts of the wound, which had previously been dressed with listerism. F. D. B.

ALFRED HOSPITAL.

Addison's Disease, Running an Acute Course.

Under the care of Dr. JAMIESON.

Reported by A. S. JOSKE, M.B., Ch.B.

E. B., aged 40, married, was admitted into the Alfred Hospital December 30, 1886. She states she was quite well up till four months previous to admission. She then noticed that she gradually became weaker and disinclined to do any work. This malaise gradually increased up till five weeks previous to admission, when she noticed that her eyes became yellow, and the skin all over the body becoming dark. This darkness was especially noticeable upon the face and hands, and flexures of the joints. The yellowness soon left her eyes, but the skin continued to become darker in colour. Has had great dyspnœa on exertion, and persistent vomiting for the last six weeks. Has always had good health previously. Has had pains in small of back four months ago. Father and mother healthy; alive.

On admission is very emaciated; is quite dark in colour all over body. This is perhaps more marked at the flexures of the joints, and at the umbilicus. Has persistent vomiting. Conjunctivæ clear and white. Has some dirty brown patches at the base of the tongue, and on the inside of her cheeks. Heart sounds are feeble, the first sound is hardly to be distinguished. Pulse small, weak, regular, but so thready as to be hardly distinguishable. Lungs are resonant. The discoloration is a dark brown, most marked about the umbilical region, and at the flexures of the joints, and around the traces of some old scars on the back. Patient gradually sank, vomiting being persistent, and died on the sixth day after admission.

The post-mortem showed some emaciation of the body. The heart was small and flabby, valves normal. The supra-renal capsules showed marked disease, implicating the semi-lunar ganglia. The capsules themselves were about an inch and a quarter in length, and about half an inch thick; and on section were of a grey colour shading in places into yellow. The semi-lunar ganglia were the size of a pea.

Australian Medical Journal.

FEBRUARY 15th, 1887.

COLOUR BLINDNESS.

From the scientific, as well as from the practical point of view, the subject of colour blindness is of very great importance. This is true, especially of that form of it which is congenital in its nature, and which differs essentially from that which is associated with extensive disease of the retina. It is only of its importance from the practical point of view that we can here refer to it now, and that in connection with a discussion, which is fully reported in the present number of the Journal. In the congenital form of the condition, the special interest lies in the fact that vision, so far as regards perception of form, generally is perfect, and as a consequence of this, the subject of it is not aware of his defect, unless his attention has been turned to it, or he has had his visual power properly tested. In this liability to ignorance of the existence of his defective vision, lies the great source of danger to the public in some cases. Unless proper safeguards are adopted, such a colour blind person may be an enginedriver on the railways, or steersman or outlook man on a ship. Of late years much has been done to minimise the risk of danger arising to railway travellers from this cause, but so far, very little has been done to protect those who entrust themselves or their property to the chances of the sea. Here in Victoria, though all that might be may not be done for the public safety, it is also certain that we are not behind other parts of the world in the adoption of precautions. The fact that all the railways are State property, makes it possible to carry out a uniform and satisfactory system of examining employés. The thing can be done, in fact, whether or not there is formal legislation on the subject, while such legislation may fail more or less completely of effect, when it is in opposition to the vested interests or the selfish greed of private proprietors or public companies. This seems to be the case in America, and even in England most of the railway companies are content to trust the testing of the colour sense of employés to non-medical inspectors. In this colony, the Railway Commissioners insist that all candidates for employment shall pass a full and careful medical examination, the colour sense being tested in the case of every man who may, by any chance, be in charge either of a train or of the signals. They have even gone further, and caused all officials holding such positions to be tested for colour blindness. It may therefore be confidently asserted that the safety of the travelling public has been properly considered in this important respect. Of course, there seems to be a theoretical propriety in the contention, that vision, both as regards form and colour, should be tested by one who has made ophthalmology his special study, but practically it is neither convenient nor necessary. Any properly qualified medical man, who gives a sufficient amount of attention and care to the details of the examination, can with something like certainty determine whether a man is fitted, not only in respect of general health and vigour, but also as regards the perfection of the special senses, to undertake the duties of a railway porter or engine-driver. Railway Commissioners or Directors will always wish, and rightly wish, to have one man responsible for the proper performance of the routine work of examining and reporting on the physical condition of candidates, though he may find it necessary to get the help of some specialist in particular cases. If an oculist is necessary to test the eyes, it is not easy to see why a claim might not be put in to have the hearing tested by an aurist, on the ground that it is of special importance for porters and others to hear well. The expense and trouble connected with such double or triple examinations, in addition to the divided responsibility, would be felt to be unbearable, and in this world of compromises, the feasible and sufficient must, in this as in so many other cases, be accepted, though theoretically there may be a more perfect way.

The following correspondence on the question of colour blindness and its detection appeared in *The Argus*, and as it may be regarded as supplementary to the papers read at the meetings of the Medical Societies, we reprint the letters. In doing this, as well as in printing the papers in full, we depart from our rule of not publishing contributions which have appeared in another journal or newspaper. We do so partly in view of the great interest to the profession, as well as to the public, of the whole discussion, and also, in deference to an expression of opinion by the Committee of the Medical Society of Victoria.

To the Editor of The Argus.

Sir,—In to-day's issue of *The Argus* there is a paper on colour blindness, read by Mr. Rudall before the Victorian branch of the

British Medical Association. In this paper Mr. Rudall accuses me, by implication, of being incompetent to examine the colour sense of the railway employés, a duty, as he cannot but be aware, I have performed for the last four years.

There is no country in the world, as far as I know, in which the authorities find themselves called upon to engage the services of oculists for the purpose of examining the railway employés in regard to their colour perception, nor is there the least necessity for them to do so. Every medical man, if he will only make himself thoroughly acquainted with Holmgren's excellent and ready method, can determine without difficulty, and with absolute certainty, whether the colour sense of a person is defective or not. I challenge Mr. Rudall to show that, by the method which he uses for testing colour sense, he arrives at conclusions more satisfactory than I do by the aid of the simple wool test.

Mr. Rudall states that he has examined enginedrivers of the Victorian Railways, and found them colour blind. How is it then, that, in his great anxiety to protect the public from injury, he did not at once furnish the Commissioners with the names of these men?

During the last two years I have examined several thousands of the old employés with reference to their colour sense, and I have good reason to believe that there is not an enginedriver or fireman in the service who has not thus been tested. Now, if Mr. Rudall can prove, to the satisfaction of the Commissioners, the existence of even one case of colour blindness among the host of men passed by me as normal in their perception of colours, I shall feel it my duty at once to relinquish that part of my official duties.

During the debate that followed the reading of Mr. Rudall's paper, Dr. Shields stated that "candidates for the railway service had for many years been examined for colour blindness, but the examination had not been of a reliable character." If Dr. Shields, in making this statement, only refers to the naming colours test, which, as I am told, he himself adopted, I entirely agree with him. That test is utterly useless, and should have long since been done away with. If Dr. Shields will, however, take the trouble to devote a little attention to Holmgren's system and its application, I have no doubt that his views regarding the appointment of a special oculist, for the purpose of conducting colour examinations in the railway service, will be considerably modified.—I am, &c.,

H. JONASSON, M.D.,

Jan. 27. Railway Medical Inspector

Sir,—I should prefer to leave unanswered the somewhat acrimonious letter of Dr. Jonasson, which appears in *The Argus* of this day, did I not think an erroneous impression might thereby be left in the minds of some of your readers. That letter contains so many misstatements, that it would be as unreasonable to expect me to controvert them here, as to ask you to devote space for all the arguments, technical and other, which might become necessary for the purpose. It was, and still is, open to Dr. Jonasson or any other person elsewhere, to traverse my opinions if he can. One paragraph of Dr. Jonasson's letter specially demands a reply. He asks how it is that, in my great anxiety to protect the public from injury, I did not furnish the Railway Commissioners with the names of the engine drivers whom I found to be colour blind? Is Dr. Jonasson not aware that to take such a course would be, on the one hand, a gross violation of professional confidence; and, on the other hand, would not necessarily have any effect in protecting the public? I readily admit that sometimes when I have examined such persons as pilots and officers of ships, and have impressed on them that they were not fit for their duties, it has been a most unpleasant reflection to me that my powers ended with advice and information to the patients, and that, so far as I was concerned, it rested with themselves whether or not they would act in accordance with my injunctions.

The object of my paper was strongly to enforce two points—first, that the amount of disqualifying ametropia, or of defective colour sense, should be defined, and, in fact, should be the standard adopted by the congress of 1881, and the test methods essentially those there recommended; secondly, that the examinations should be conducted by competent experts, who, in the words of the congress, "should be men of ascertained competency, and as far as possible qualified as medical specialists."

It is for those who advocate continuing the present state of things to show how far these conditions have been complied with in Victoria.

My paper did not enter into technical details of testing, either for ametropia or for colour blindness, but I decline to admit the complete sufficiency of Holmgren's test; and if Dr. Jonasson still maintains that I am wrong, then I can console myself with the remembrance that Professor Donders, Sir Wm. Bowman, Professor Leber, Dr. Ole Bull, Dr. Joy Jeffries, and others are also at fault. In the hope that I have not encroached too much on your valuable space.—I am, &c.

Jan. 28. JAMES T. RUDALL, F.R.C.S.

Sir,—As I am in the habit of examining men for their colour sense in my capacity as medical officer to the Harbour Trust, I ask permission to make a remark on this deficiency. I quite agree with Dr. Jonasson, in his letter in to-day's issue, as to the excellence of Holmgren's method and its facility of being comprehended. Any medical man, if he will obtain a copy of the small book entitled *The Detection of Colour Blindness and Imperfect Eyesight*, by Charles Roberts, F.R.C.S., &c., a work which was originally compiled for the Anthropometric Committee of the British Association for the Advancement of Science, and peruse the three or four pages therein on "the detection of colour blindness by Holmgren's method with loose skeins of Berlin wool, condensed from Dr. Joy Jeffries' translation," will find all that would practically be required of him in reference to the subject. Anyone who knows anything about it will admit the inadequacy of a simple name test, but by employing the tests indicated by Holmgren, subjective deception is eliminated, and complete or incomplete blindness to one or more colours can be discovered.—Yours, &c.,

Jan. 28. P. B. Bennie, M.D.

Sir,—I do not think that Mr. Rudall, in his reply to my letter of yesterday, has improved his position one iota. If he considers my remarks "somewhat acrimonious" he should remember that people object to being stabbed, and still more, to being stabbed in the dark. He says my letter contains many misstatements; but, I am sure, Sir, you would have been only too willing to afford him space to expose at least one of them, if he were able to do so. It appears to me that Mr. Rudall mixes up two kinds of colour blindness, which have probably nothing in common but the name. The one, acquired colour blindness, being invariably associated with serious defect of sight, is no doubt a subject entirely for the consideration of the specialist, and Mr. Rudall is quite at liberty, as far as I am concerned, in any cases of this kind, "to define the amount of defective colour sense" in any way he pleases. The other, congenital colour blindness, is a peculiar condition in which the acuteness of vision is normal, and its cause is unknown. It is this latter form of colour blindness alone on which railway medical inspectors, or examiners for navigation boards, are called upon to give a decision, and Holmgren's test enables them to decide—1. Whether a case is one of colour blindness; 2. Whether it is a genuine case or one of imposition; 3. Whether it is one of green, red, or mixed colour blindness; and 4. Whether the defect is of a high or of a low degree. I consider that the results thus obtained are amply sufficient for all practical purposes.

I am sure that nobody can entertain a higher admiration of the labours and achievements of the illustrious men enumerated by Mr. Rudall than I do. But if he imagines that, in a matter in which I have what I may venture to call my own extensive experience to guide me, he can, by a mere array of celebrated names, frighten me, he is mistaken.

After all, the proof of the pudding is in the eating. Although my statistics are not complete as yet, I think I may safely state that the number of railway employés declared by me to be absolutely colour blind, and who have consequently been removed from the service, amounts to fully 3 per cent. Many of these did appeal against my decision, and very naturally too; some even backed up by medical certificates. In all these appeal cases, however, without exception, I was able to prove by ocular demonstration, in presence of the Commissioners, the locomotive superintendent, and the general traffic manager, that my judgment was a correct one. I am afraid, Sir, you will consider this letter a rather long one for a daily paper; but I promise you that I shall not again address you on this subject. I am intensely averse to controversies in the public press on professional matters, but Mr. Rudall's conduct has compelled me to vindicate my official position in the eyes of the public, and more especially in the eyes of the Commissioners, who have done me the honour of entrusting me with a highly responsible though often very unpleasant task, now, happily, almost concluded. I do not remember a single instance in which the well-known lines of Horace are, to my mind more applicable than in regard to Mr. Rudall's paper on "Colour Blindness"—"*Parturiunt montes, nascetur ridiculus mus.*"—I am, &c.,

Jan. 29. H. Jonasson, M.D.

Sir,—If the two points insisted upon in my paper, viz., a definite degree of colour sense, of sharpness of sight, and of refraction, for railway and marine signalmen, and examiners "of ascertained competency, who should as far as possible be qualified as medical specialists," can be established here by legislative enactment, the safety of the public will be further ensured than it now is. In such case, it will be of equally small importance whether Dr. Jonasson has had any right to complain of being "stabbed in the dark," or any warrant for alleging professional incompetency against myself. Dr. Jonasson has entirely ignored the second part of the title of my paper, "Colour blindness and other defects of sight." Even supposing that a layman or a non-specialist may be competent so far as testing colour sense goes, which I do not admit as probable, will such an examiner also claim capability to test the refraction (by other than subjective methods) and to detect incipient or delicate changes in the dioptric media and in the fundus of the eye? It must be obvious that the only safe examiner is one familiar with the appearance of those parts in health and in disease. Dr. Joy Jeffries has clearly shown from practical experience that laws which leave the examination and examiner both undefined are in no small measure inoperative, and therefore dangerous.

With further apology for occupying your space,—I am, &c.,

Jan. 31. JAMES T. RUDALL, F.R.C.S.

INTERCOLONIAL MEDICAL CONGRESS.

The arrangements in connection with the Congress are gradually becoming perfected. The Presidents of several of the Medical Societies in Australia and New Zealand have already written, agreeing to act as Vice-Presidents, and a good many promises of contributions have been received by the Secretary, Dr. Poulton, of Adelaide. Such announcements of contributions will be received up to 30th of June, but to facilitate the preparation of the programme of proceedings, it is desirable that notice of intention to read a paper should be sent in as early as possible. Visitors are expected from India and other countries, and altogether there is every appearance that the meeting will be successful. The Governors of South Australia, Victoria, New South Wales, and Queensland have promised their patronage. The Executive Committee hope very shortly to issue a circular, announcing the final arrangements for the Congress, and stating the facilities which will be offered by the railway authorities to members.

Review.

RINGER'S THERAPEUTICS.*

Very few medical books of recent times have had such a success as this of Dr. Ringer's. It has grown steadily in bulk with each successive edition, and it now contains a tolerably full account of what has been imagined, as well as what has been proved about the actions of drugs. Perhaps its success has been to a considerable extent owing to the readiness with which the author has found space for a record of the opinions of all sorts and conditions of men. Any one, therefore, who is puzzling over an obscure or obstinate case, is likely to get hints for treatment, not always of necessity good. This is, in a way, the strength of the book, but in another way it is also its weakness. It contains too much undigested matter, and it might be well if Dr. Ringer could make up his mind to cease adding to the bulk of its contents, and, instead, subject the whole to careful revision and rather free pruning. While we believe that its practical usefulness would in this way be increased, we make haste to add that as a work of reference it has much value, a great help being supplied in a copious "index to diseases," an alphabetical list of diseases and symptoms, with brief therapeutic notes under each heading.

J. J.

University Intelligence.

MELBOURNE UNIVERSITY.

At the Meeting of the Council on the 7th inst., Professor Halford resigned the position of Co-examiner in Descriptive and Surgical Anatomy, and it was decided to call for applications for the position.

The Vice-Chancellor moved the adoption of a resolution of the Faculty of Medicine, to the effect that the regulations regarding the medical course should be amended, so as to abolish the restrictions placed upon attendance at lectures, and to provide merely that a three-fourths attendance at lectures should qualify a candidate to present himself for examination in each subject.

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* A Handbook of Therapeutics, by Sydney Ringer, M.D. 11th Edition. London: H. K. Lewis, 1886.

The motion was agreed to.

On the motion of Mr. Macfarland, it was decided to ask Dr. Williams whether he would consent to continue as Lecturer on Materia Medica, Medical Botany, and Elementary Therapeutics, of which position he had sent in his resignation, and in the event of Dr. Williams refusing, that applications should be invited for the appointment.

It was resolved to invite applications for the position of Demonstrator of Anatomy, in the place of Mr. F. D. Bird, resigned.

Dr. Robertson, moved, in regard to the claim made by Prof. Allen for special payment for the services rendered by him as Demonstrator of Morbid Anatomy:—"That the following resolution of the Council, passed on the 27th September, 1886, be rescinded: 'That as it appears by the records of this Council that the duties of Demonstrator of Morbid Anatomy are included in those of Professor of Anatomy and Pathology, and were so included prior to Professor Allen's appointment and by his knowledge, Professor Allen has already been paid for the services for which he now asks payment.'" Contingent upon this being carried, he intended to move that Professor Allen should be specially remunerated for his work as Demonstrator of Morbid Anatomy, at the rate of £100 per annum.

The motion was carried by the casting vote of the Vice-Chancellor, and it was resolved that Professor Allen's letter, together with a summary of the facts of the case, should be prepared for presentation at next meeting of the Council.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee on the 25th ult., leave of absence was given to Dr. Springthorpe, but it was resolved that in future members of the Medical Staff should not make their arrangements for taking a holiday on a certain date, until the Committee had granted leave of absence on such date.

It was agreed to improve the nurses' quarters by erecting partitions in the large dormitories, the cost to be £225. A recommendation from the Building Committee, that a new building should be erected to accommodate 22 nurses, was not adopted, on the ground that it would be injudicious to spend a large sum on permanent improvements at present, when the removal of the hospital is under discussion. The report of the Sub-committee, recommending the erection in the grounds of tents to accommodate 100 patients, was postponed.

The Secretary reported that there was great pressure on the accommodation in the hospital, and recommended that an advertisement should be published, warning all persons to ascertain before bringing patients whether there was any vacant place. The recommendation was agreed to.

At the meeting on the 8th inst., Dr. J. W. Barrett applied for the appointment of Oculist to the hospital. The letter was referred to the Medical Superintendent for report.

Additional leave of absence for three weeks was granted to Dr. Llewelyn, on account of continued ill-health.

It was agreed to ask the Government to alter the bye-laws, so as to allow of the Endowment Fund being drawn on for the purpose of paying off a bank overdraft of £10,000, incurred for purposes of maintenance.

The Annual Meeting of the Governors of the Melbourne Hospital was held on the 27th ult. The report of the Committee stated that the income during the year for the purpose of maintenance, inclusive of £14,000 from the Parliamentary vote, and £2,806 from the Committee of the Hospital Sunday Fund, amounted to £23,362. The expenditure had been £24,861, and the debit balance had been augmented to £7,708. The amount to the credit of the Endowment Fund was £25,182. The benefits of the hospital had been extended to 19,398 cases, of which number 15,607 had been treated as outpatients, and 3,791 had been received into the institution. Of these 2,811 had been cured or relieved, 145 had been discharged as incurable or for other reasons, 577 had died, and 238 remained. Of the cases that terminated fatally, 182 died within 72 hours from the time of their admission. The Committee viewed with much concern the continued reduction of the amount allotted to the institution from the annual vote of the Legislature, and appealed to the public for increased liberality. The sanitary condition of the hospital was declared to be satisfactory, and the Committee congratulated the Governors on the general tenor of the report of the Select Committee on the hospital. The Committee thought that if a suitable site could be obtained, it would be desirable to remove the hospital, and they endorsed the recommendation of the Select Committee for the erection of a Consumption Hospital, which would be a means of relieving the institution. The report and balance-sheet were adopted. Reference was made to the overcrowded state of the hospital, and the opinion was expressed that the Committee should refuse to admit a larger number of patients than the institution would properly accommodate.

ALFRED HOSPITAL.

At the meeting of the Committee on the 28th ult., it was unanimously resolved that an address should be presented to Dr. J. B. Backhouse, the Resident Medical Officer, on his retirement from office, expressing the regret of the managers at the termination of his long connection with the institution as Resident Medical Officer, and their high appreciation of his efficient and satisfactory services for the past five years, and of the tact, skill, and patience with which he had performed his duties. It was resolved to appoint a Resident Physician and a Resident Surgeon, at an annual salary of £150 each; and at the meeting on the 11th inst., Dr. Joske, who has been acting as Assistant Resident Medical Officer, was appointed to the former position, and Dr. J. Sutherland to the latter.

WOMEN'S HOSPITAL.

The Committee have decided to accept plans prepared by Mr. Purchas, Architect, of Selborne Chambers, for the erection of the Genevieve Ward wing of the institution. The additions will be somewhat in the form of detached buildings joined by corridors. The cost of the proposed work is estimated at £8,000. The Committee of the hospital have also determined to invite applications for the position of Superintendent and Secretary.

Dr. Neville has been appointed Assistant Resident Medical Officer, at a salary of £100 a year, the experiment of appointing such an officer for six months without salary not having proved successful.

Dr. Balls-Headley having resolved to visit Europe, applied for leave of absence for twelve months, and nominated Dr. Doyle as his *locum tenens*. His application has been refused by the Committee, and accordingly he has announced that his departure is postponed indefinitely.

Following the example of the Alfred Hospital, a system of training nurses has been adopted in the Sandhurst Hospital, lectures and other instruction being given by Drs. Colquhoun, Hincheliffe and M'Kee. The services of these trained nurses have been found useful, not only in the hospital, but for private cases outside.

Dr. E. M. Owens, Hon. Opthalmic Surgeon to the Children's Hospital, Brisbane, has been appointed Hon. Consulting Opthalmic Surgeon to the Toowoomba Hospital.

Vital Statistics.

The report of the Government Statist on the vital statistics of Melbourne and suburbs, for December 1886, shows that the births of 1042 children, viz., 548 boys and 494 girls, were registered during the month.

The deaths registered numbered 766, viz., 425 of males, and 341 of females.

To every 1000 of the population of the district the proportion of births was 3·02, and of deaths 2·22.

One hundred and twenty four deaths occurred in public institutions.

The number of children under one year of age who died was 319, the total number under 5 years being 384.

As compared with the experience of the previous month, deaths from specific febrile or zymotic diseases increased from 137 to 185. Under this head, deaths from typhoid fever rose from 1 to 26, those from whooping cough from 5 to 10, and those from diarrhœal diseases (which are usually present at the setting in of the hot weather) from 111 to 130. Only 3 deaths took place during the month among child-bearing women, or 1 death of a mother to every 347 children born alive, a proportion much below the average.

Local Subjects.

Medical Board of Victoria.—The following gentlemen have registered their qualifications: David Trumpy, Melbourne, Staats Examen., 1879, M.D. Zurich, 1880; Ezra Hurlburt Williams, Fitzroy, L.R.C.P. Lond. 1884; Andrew Grant, Melbourne, M.B. et Ch. M. Aberd. 1884; Adolphe Frederick Seelenmeyer, Melbourne, M.D. Brussels, 1885, L. et L. Mid. R.C.P. et

R.C.S. Edin. 1885; Percy Dean Bray, Williamstown, M.R.C.S. Eng. 1885, L.S.A. Lond. 1884; Walter William Stockton Jones, East Melbourne, L.R.C.S. Irel. 1881, L. et L. Mid. K.Q.C.P. Irel. 1881; George James Archibald Billing Halford, Beaconsfield, M.B. Melb. 1886; John Reid, Melbourne, M.B. et Ch. M. 1882, M.D. 1886, Aberd.; William Macansh, Brighton, L. et L. Mid. R.C.P. et R.C.S. Edin. 1885, L.F.P.S. Glas. 1885, M.B. et Ch. M. Edin. 1886; Donald Stewart MacColl, Richmond, M.B et Ch. M. Glas. 1886; Thomas James Barr, Melbourne, L. et L. Mid. R.C.P. et R.C.S. Edin. 1886, L.F.P.S. Glas. 1886; Edgar Montgomery Inglis, Melbourne, M.B. et Ch. M. Edin. 1886, L. et L. Mid. R.C.P. et R.C.S. Edin. 1885, L.F.P.S. Glas. 1885; William Sidney Ridout Woodforde, Penshurst, L.S.A. Lond. 1884, M.B. et Ch. M. Edin. 1886.

Names of Deceased Medical Practitioners ordered to be erased from the Register:—No. 202, William Augustus Heise, M.B.; No. 509, Thomas William Lockyer Martyr, M.R.C.S.; No. 988, John Lindsay Miller, M.D.; No. 481, John McCann, M.R.C.S.; No. 354, Valentine Baker Webb, Richmond, M.R.C.S.; No. 93, Benjamin Warren, L.R.C.S.; No. 1 (Part III.), Frederick Cox Atkinson.

Health Officers.—The following appointments have been confirmed: Shire of Creswick—William Robert Allen, L.R.C.P., *vice* Robert Charles Lindsay, L.F.P.S.; Shire of Walhalla—Henry Warburton Banton Gamble, L.R.C.S.; Shire of Ballarat—Montagu William Cairns Perceval, M.R.C.P., *vice* Stanislaus Emil Antony Zichy-Woinarski, M.B., resigned.

Public Vaccinators.—The following appointments have been made: Queenscliff—Thomas Davison Moore, L.R.C.S., *vice* Walter Scott, M.R.C.S., whose resignation has been accepted; Northcote—Reginald Edward Weigall, M.B., *vice* F. Daniel, L.F.P.S., whose resignation has been accepted; Harrow—George Fox, M.R.C.S., temporarily, during the absence on leave of Frederick Dell Hayman, M.R.C.S.; Kyabram—Warwick G. McLennan, M.R.C.S.

Central Board of Health.—At the meeting of the Board on the 21st ult., a letter was received from the Town Clerk of Melbourne, pointing out the difficulties attendant on any attempt to enforce the use of deodorants. As the Board considered that the *disinfection* of night-soil is necessary in the interests of public health, it was agreed to issue an order requiring the City Council to pass a bye-law making the use of *deodorants* compulsory.

It was resolved that the drain at Montague, near the railway, should be immediately disinfected, and that the Port Melbourne Local Board should be ordered to put the drain into proper condition.

The draft of a letter to the Chief Secretary, urging the establishment of Federal Quarantine, was adopted.

A letter was received from the Public Works Department objecting to the Board's Plan for improving the Port Melbourne Lagoon. It was agreed to reply that alterations which were necessary would be made.

At the meeting on the 4th inst., it was reported that the healthy passengers of the *Preussen* had been discharged from quarantine, the others who had suffered from small-pox remaining for the present.

Mr. George J. Butler was appointed temporary Assistant-Inspector, his special duty being to report on the sanitary condition of localities in which typhoid had occurred.

Prominent attention was called to the fact that a Local Board is bound to provide medical attendance and medicines for persons suffering from typhoid or similar contagious diseases, and who are unable to pay for such attendance.

Complaint was made by the police of the bad condition of drains from the Barracks and the Homœopathic Hospital.

A report by Dr. Jamieson, Health Officer of the City, was forwarded by the Town Clerk, in which exception was taken to the statement that 29 cases of typhoid had been reported, as he had been able to discover only 18 in the period from 1st to 21st January. The President admitted that the tabulated statements prepared by the Board were simply given for what they were worth. Dr. Rose took exception to certain statements contained in a supplementary report sent to the Local Board by Dr. Jamieson, in which he complained of neglect on the part of a medical practitioner to report promptly on certain cases, in which there had been neglect of precautions. He was himself the medical man referred to, and he made various charges of untruth against Dr. Jamieson. The latter has written letters to the *Argus* and *Age*, pointing out fully the unfounded nature of the charges of untruth, and challenging Dr. Rose to withdraw them, in the face of documentary evidence, which he had forwarded to the President of the Board. Dr. Rose has not ventured to contradict the evidence adduced by Dr. Jamieson, but just as little has he had the grace to withdraw his charge.

Mr. Newberry referred to the practice of burying night-soil in the grounds of the Benevolent Asylum, and it was decided to draw the attention of the Local Board to the alleged nuisance. As a matter of fact we understand that the practice complained of was stopped some time ago when complaint was made about it.

BIRTHS.

COLQUHOUN.—On the 12th ult., at Sandhurst, the wife of Dr. A. Colquhoun of a son.

COX.—On the 12th ult., at 202 Collins-street east, the wife of Dr. Cox of a son.

GRAHAM.—On the 12th ult., at Caversham, Moonee Ponds, the wife of G. R. Moore Graham, physician, Echuca, of a son, prematurely.

KENNEDY.—On the 9th ult., at Stoneleigh, Albury, the wife of P. Kennedy, L.R.C.S., of a daughter.

MARRIAGES.

NICHOLSON—COSTER.—On the 19th ult., at Trinity Church, Benalla, by the Rev. Edwin Rodda, John Nicholson, M.D., M.R.C.S. England, to Fannie, second daughter of Frederick Coster, solicitor, Benalla.

SPRINGTHORPE—INGLIS.—On the 26th ult., at the residence of the bride's parents, Eurolie, Vaucluse, J. W. Springthorpe, M.D., of Collins-street, to Annie Constance, eldest daughter of John Inglis.

DEATH.

FULFORD.—On the 22nd ult., at Penshurst, John Fulford, M.R.C.S. Eng. &c., third son of Rev. John Fulford, aged 30 years.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in Pamphlet form by communicating with the Publishers before the issue of the *Journal.*

THE
Australian Medical Journal
MARCH 15, 1887.

Original Articles.

THE STATISTICS OF CANCER IN ENGLAND AND VICTORIA COMPARED.

By Alfred Haviland, M.R.C.S.

The interesting report on "Deaths from Cancer, 1861 to 1884," which Mr. Henry Heylyn Hayter, C.M.G., Government Statist of Victoria, published in his valuable *Victorian Year Book for* 1884-5, contains facts of so much importance in the study of this dreadest, and unfortunately increasing disease, that I venture now to re-produce them and compare them with the contemporary statistics of cancer in England. With the view of a more thorough comparison, I have calculated the death-rates of the two sexes separately for Victoria, during the two decennial periods 1861–1870, and 1871–1880, the three quinquennial periods 1870–1874, 1875–1879, and 1880–1884, and the annual death-rates for each of the years 1881, 1882, 1883, 1884. The facts elicited by these calculations I have tabulated in juxtaposition with those that obtained in England at the same dates; the quinquennial periods will be omitted in the general table.

On the 30th November, 1868, I read before the Medical Society of London, a paper on "The Geographical Distribution of Cancer in Females in England and Wales, 1851–1860," and I then pointed out on a map that "The cancer-fields of England are to be found in the sheltered and low-lying vales traversed by fully-formed rivers, and having sites composed of the more recent geological formations, such as the crag and alluvium of the Norfolk and Suffolk field, the clay of the Thames field, and the alluvium of the Lincolnshire and East Yorkshire groups. The haunts of cancer are generally sheltered valleys, like those of the Severn, the Wye, and the mid-Devon rivers.

In 1875, I published my large work on "The Geographical Distribution of Heart Disease, Phthisis, and Cancer in Females," with three coloured maps, one of which was devoted to cancer in England and Wales. In the chapter on "The Mortality from

Cancer, in relation to seasonally flooded rivers," I pointed out the fact, that the highest death-rates among females were to be found in the riparial districts of fully-formed rivers that were in the habit of causing floods seasonally, after heavy rains and sudden thaws. This fact I ascertained from the death-rates from cancer during the decennial period 1851–1860. Since then I have added the death-rates of another decennial period 1861–70, which fully confirm it. I had hoped ere this to have completed the series of thirty years, but the present Registrar-General of England, in the third decennial supplement for 1871–1880, has so far departed from the form laid down by the late lamented Dr. William Farr, F.R.S., as essential for these periodical reports, as to omit giving the number of deaths for each sex separately and at different periods of life, for each of the 630 registration districts, into which England and Wales are divided, contenting himself with a commingling of the sexes under the meaningless term "person." The reasons assigned for these gross blunders are: "Not merely to economise space, but to give a broader, and therefore more secure basis for the calculation of rates, and also to meet the practical requirements of the medical department of the Local Government Board." The most likely reason, however, is the one suggested by *The Lancet* (Nov. 6, 1886): "It looks very like one of those petty economies, which sometimes are enforced, even at the risk of destroying really useful work." I have simply mentioned this fact, as the reason why we are not in a position to carry on the investigations which the work of Dr. Farr enabled the Medical Geographer to pursue. In his time, we had reason to be proud of the Statistical Department at our Registrar-General's Office. *Tempora mutantur.*

I will now append the tables of cancer death-rates, to which I shall refer in the few remarks I have to make on this most interesting subject:

TABLE I.—Three Quinquennial Periods.—Victoria.

Years.—1870-1874	..	2·96 Males	..	3·13 Females.
,, 1875-1879	..	4·05 ,,	..	3·96 ,,
,, 1880-1884	..	4·32 ,,	..	4·50 ,,

Annually to every 10,000 of each sex living.

TABLE II.—One Decennial Period.—England.

Years.—1851-1860	..	1·95 Males	..	4·34 Females.

Annually to every 10,000 of each sex living.

TABLE III.—Two Decennial Periods.

			England.		Victoria.
Males.—	1861-1870	..	2·44	..	1·91
,,	1871-1880	..	3·15	..	3·69
Females.—	1861-1870	..	5·23	..	2·55
,,	1871-1880	..	6·22	..	3·69

TABLE IV.—The Annual Death-Rates to every 10,000 of each Sex Living.

			England.		Victoria.
Males.—	1881	..	3·63	..	3·70
,,	1882	..	3·64	..	4·35
,,	1883	..	3·81	..	4·74
,,	1884	..	4·04	..	4·58
Females.—	1881	..	6·67	..	4·28
,,	1882	..	6·91	..	3·84
,,	1883	..	7·01	..	4·90
,,	1884	..	7·07	..	4·99

TABLE V.—Showing the Difference between the English and Victorian Death-Rates from Cancer.

			English.		Victorian.		Excess + Deficit − Victorian.
Males.—	1861-1870	..	2·44	..	1·91	..	− 0·53
,,	1871-1880	..	3·15	..	3·69	..	+ 0·44
,,	1881	..	3·63	..	3·70	..	+ 0·07
,,	1885	..	3·64	..	4·35	..	+ 0·71
,,	1883	..	3·81	..	4·74	..	+ 0·93
,,	1884	..	4·04	..	4·58	..	+ 0·54
,,	1881-1884	..	3·78	..	4·28	..	+ 0·50
Females.—	1861-1870	..	5·23	..	2·55	..	− 2·68
,,	1871-1880	..	6·22	..	3·69	..	− 2·53
,,	1861	..	6·67	..	4·28	..	− 2·39
,,	1882	..	6·91	..	3·84	..	− 3·07
,,	1883	..	7·01	..	4·90	..	− 2·11
,,	1884	..	7·07	..	4·99	..	− 2·08
,,	1881-1884	..	6·92	..	4·52	..	− 2·40

TABLE VI.—Showing the Difference in the Death-Rates from Cancer between (1) The Riparial; (2) The Supra-Riparial; and (3) The Water-Parting Districts in the Basin of the Thames—20 Years —1851-1870.

Males.—	Entire Left Riparial Districts ..	2·63
,,	,, Right ,, ,, ...	2·45
,,	Left and Right Supra-Riparial Districts	2·41
,,	,, ,, Water-Parting ,,	2·05
Females.—	Entire Left Riparial Districts ..	6·12
,,	,, Right ,, ,, ...	6·71
,,	Left and Right Supra-Riparial Districts	5·21
,,	,, ,, Water-Parting ,,	4·57

Difference in the Death-rates between the Districts on the Banks of the Thames subject to floods (Riparial), and the elevated Districts (Water-Parting), in which the Thames and its Tributaries have their source:

Males ..	0·58	Females ..	1·55
" ..	0·40	" ..	2·14

The above tables show the following facts:

Table. I.—The rapid increase in the death-rate from cancer in Victoria during the three quinquennial periods between 1870 and 1884, an increase equal to 1·36 among males, and 1·37 among females.

Tables II., III., and IV.—Show how the annual mortality from this disease among males and females has increased in England since the decennial period 1851-1860 up to 1884—an increase equal to an annual mortality of 2·09 among males and 2·73 among females.

Tables III. and IV.—Show the same for England and Victoria since the decennial period 1861-70 up to 1884. The increase being among males, England 1·60, Victoria 3·08; females, England 1·84, Victoria 2·44.

Table V.—Shows the difference between the English and Victorian death-rates from cancer among males and females from 1861 to 1884; during two decennial periods and the four separate years 1881-1884.

Table VI.—Refers to the Thames Basin Cancer Field.

I have not time at present to fully discuss the above tables, but I wish to draw attention to one or two facts which they reveal, with the view of interesting the medical profession in Australia, and of inducing them to give me their experience of the history of this disease in that colony. Their corroboration or correction will be equally valuable to me.

In the first place, it is evident that cancer is increasing rapidly, both in England and Victoria. Secondly, that the disparity between the male and female death-rates is much less in Victoria than in England, where up to the decennial period 1861-70 the mortality among females used to be more than double that among males; 1861-70, males 2·44, females 5·23. During the 4 years 1881-1884 a great change has taken place, for we find the disparity considerably lessened, the death-rates being, males 3·78, females 6·92. In Victoria cancer affects the sexes much more equally. Thus, during the decade 1861-70, 1·91 males and 2·55 females to every 10,000 of each sex living died annually from it, and in the next ten year period, 1871-80, the death-rates were equal, 3·69 males and 3·69 females, and during the four years 1881-84 this equality was but little disturbed, for the death-rates were 4·28 males and 4·52 females.

Cancer is increasing in Victoria, but the causes of its increase seem, from these figures, to be of such a nature as to affect those organs principally which the two sexes have in common. Woman has three organs which man has not, peculiarly liable, in England, to cancer—the uterus and the two mammæ. In England the highest mortality among females is to be found in the riparial districts of rivers that seasonally flood the districts they traverse. On the high limestone, chalk, silurian, or other elevated and dry districts, we find the mortality among women approaching that of the men, but as we descend into the valleys traversed by rivers that flood the country, we find the death-rate among women gradually increasing, until it reaches its maximum in the towns and villages which skirt the river's bank. In Victoria, if I understand rightly, there are no communities living on the banks of rivers which seasonally are in flood from heavy rains and sudden thaws. It appears to me that the populations in Victoria are similarly situated to those of the water-parting districts of the Thames. At all events the whole matter requires thorough investigation throughout the world. In the Thames basin, the mean figures for which I have given above, there are 27 riparial districts, having a mean population, exclusive of London (1851-70), of 677,874 persons, and 5358 cancer deaths. London, mean population 2,799,329, deaths from cancer 26,282; 28 supra-riparial districts, mean population 58,707,* deaths from cancer 4526; and 31 water-parting or fontal districts, mean population 516,814, cancer deaths 3407.

London, 31st December, 1886.

A CASE OF NEPHRO-LITHOTOMY.

By W. Gardner, M.D. C.M. Glas.
Surgeon Adelaide Hospital.
Lecturer on Surgery, Adelaide University.

Daniel D., æt. 23, consulted me first on 29th January, 1887, complaining of pain in the left lumbar region, from which he has suffered for the last three years. Whenever he works or runs the urine becomes like blood, and on passing it he has pain across the lower part of the abdomen. When the pain is very severe he has to make water frequently, and sometimes there is a difficulty in starting the stream.

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* There is a manifest error in this figure, and probably, instead of 58,707, it should read as 587,070, or something closely approximating to it.—[Ed.]

Three years ago last November, was working at a dam with an excavator, and while running across it he fell down on his left side, and twenty minutes after on attempting to make water he passed pure blood. This continued for a month. Has never been able to do a hard day's work since, without feeling the pain. In every severe attack has had pain in the left testicle. Family history good. Previous health good. Has not suffered from any venereal disease. Heart and lungs normal; sounded, no stone or stricture. There is undoubted tenderness over the left kidney, detected by bimanual palpation between the abdomen in front and the loin. Microscopical examination of the urine showed pus, and blood-corpuscles, and abundant crystals of oxalate of lime, octahedral shape. After a careful consideration of the case, the diagnosis made was probable oxalate of lime calculus in the left kidney.

On the 10th February, the patient was placed under the influence of ether by Dr. Lloyd, and a transverse incision was made in the left lumbar region about four inches long, and three-quarters of an inch below the twelfth rib. The dissection was continued downwards through the muscles and the lumbar aponeurosis, and the quadratus lumborum was divided for one inch.

The bleeding was controlled by the application of pressure forceps, and the separation of the supra-renal fat, and capsule of the kidney was made by tearing with the two forefingers. The kidney could then be plainly felt and seen, and a fine trocar was thrust into it, and gave the peculiar grating feeling caused by striking calculous matter. The kidney was then incised till the point of the trocar was reached, and then a small stone was felt resting in one of the calyces below the incision. By means of the left forefinger in the wound, and a small pair of lithotomy forceps passed into the kidney by the right hand, the stone was delivered. The wound was then douched out with warm thymol solution, and two large drainage tubes inserted into the post-renal cavity, and the edges brought together with interrupted sutures of silver wire and wallaby tendon, alternately. The stone weighed 25 grains, and consisted of oxalate of lime.

Feb. 10th, 7 p.m.—Rallied well after the ether, temperature 98°; vomited twice; some pain in the back; pulse very good. 9.30 p.m.—Passed O ss. of urine mixed with much blood. 12. p.m.—Temperature 101·2°. 12.30 p.m.—No sleep; restless, and in some pain; slight discharge showing at lower part of the dressing; salicylic wool applied.

Feb. 11th, 9 a.m.—Pulse 88; respiration 20; temperature 99·6°. Air-bed ordered; dressed; no blood in the tubes. 6 p.m—Temperature 100°. 8 p.m.—Sleeping soundly, discharge has not come through dressings.

Feb. 12th.—Slept fairly well through the night; pulse 88; temperature 99·6°; dressed, wound quite sweet, and urine not so highly coloured with blood. 5 p.m.—Urine not passed since 4 a.m., drawn off (12 oz.) with catheter, previously washed in thymol. Dressed; shortened tubes $\frac{1}{4}$ inch; two stitches removed. The tubes after this were gradually shortened, and the wound was regularly kept clean with thymol solution.

Feb. 16th.—Anterior half of wound well united; allowed solid food.

Feb. 17th.—Bowels acted.

Feb. 18th.—One of the tubes removed.

Feb. 21st.—Second tube was removed; no urine was passing by the lumbar wound; dressed with red lotion.

This case is remarkable as being the first reported case of nephro-lithotomy in Australia, and I shall therefore claim indulgence whilst I refer to the diagnosis of the case.

Mr. Morris in his work on the Surgical Diseases of the Kidney says, "that oxalate of lime calculus is the most common kind after uric acid, and that it is generally single." The symptoms which Mr. Morris lays down as conclusive of the presence of calculus are as follow:—

1. Blood or albumen mixed with the urine.
2. Lumbar pain, or aching aggravated by exercise, or by any jarring or jolting movement.
3. Vesical irritability.
4. Pain in the testicle of the same side.
5. Pus or mucus may be found in moderate or marked quantity in the urine.
6. The passage of gravel or minute calculi or calculous matter.
7. Attacks of renal colic.

Our patient had all these symptoms except the last two, viz. the passage of gravel and attacks of renal colic; but he had a symptom which is not mentioned in this list, and that is, acute pain on bimanual palpation of the loin on the affected side, due undoubtedly to pressure of the kidney structure on the stone. An analysis of the above-named symptoms will show that the majority of them cannot be used to differentiate the presence of stone from many other diseases of the bladder, urethra, and prostate. The absolute diagnosis can only be arrived at by excluding all diseases in the lower part of the urinary passages, and even then early strumous kidney and renal calculus are very liable to be confounded. With regard to the treatment, nephro-lithotomy aims at removing the stone from the kidney, and leaving behind a useful and healthy organ, which must be clearly separated in the mind from the operation of nephrotomy, performed for pyonephrosis, in which a stone may or may not be found, and which leaves behind a damaged organ, with possibly a lumbar fistula, and even the danger of a subsequent nephrectomy to get rid of a damaged and useless organ.

The operation of nephro-lithotomy was first performed by Morris in 1880, and up to 1885 had been done 21 times.

Twenty-four exploratory operations are said by Mr. Morris to have been done without any stone being found. Sometimes renal calculi have been removed where a fistula or retro-peritoneal abscess has formed, either by enlarging the fistulous opening, or by cutting into the abscess, and Mr. Morris says, the contemplation of such cases has led a medical author to remark, "the cautious surgery of nature is surrounded by safeguards which rarely attend the rougher operations of art;" and he has suggested that surgeons will substitute the following aphorism: "The cautious and well-timed assistance of the surgeon is surrounded by safeguards which rarely attend the reckless operations of disease."

I would say that the physician may, by making an early diagnosis of stone in the kidney, enable the surgeon to improve upon the methods of nature, both by shortening the time of the operation and lessening its pain.

My best thanks are due to Dr. Giles for his assistance at the operation, and to Dr. Aitken for the careful manner in which the after-treatment of the case was carried out.

PULMONARY SYSTOLIC MURMURS AUDIBLE OVER BOTH LUNGS.

By John Reid, M.A., M.D.

Bristowe writes, "A systolic murmur, produced at the pulmonic orifice, is heard loudest over the left edge of the sternum, or about the level of the third costal cartilage. It is heard also over the trunk of the pulmonary artery, namely, at or about the left edge of the sternum, as high as the upper border of the second cartilage. But it is inaudible, or nearly so, to the right of the sternum, and along the ascending aortic arch, and fades away as it is traced downwards over the right ventricle. Organic murmurs at this orifice are rare, excepting as the result of congenital disease." Guttmann, Physical Diagnosis, p. 236, writes, "A systolic thrill, confined to a spot in the second left intercostal space, near the sternum, may arise from roughness or contraction of the pulmonary orifice, both very rare; it may be due to mitral insufficiency, when, *e.g.*, the heart lies in immediate contact with the chest wall from retraction of the anterior margin of the left lung. Systolic *fremissement* in the second right intercostal space, close to the sternum, radiating along the bone even to the ensiform process, and to the adjacent insertions of the ribs, on the right side, proceeds from roughness or contraction of the aortic orifice, from atheroma of aortic walls, and aneurisms of ascending aorta." No other writers, so far as I am aware, have given any further details, the description of Balfour, &c., inclusive The rarity of the disease and the peculiar symptomatology may well excuse publication, and may lead to the unearthing of similar cases.

My notes on the first case are to the following effect:—J. H., aged about 70, was seen on June 25, 1883, on account of muscular sprain, arising from an accident. He did well, and on the 27th was almost able to be about again. A bruit (systolic) was heard over both lungs, loudest to the left of the sternum, near the third rib, not audible as an apex bruit, where the sounds were almost pure. There was, however, a thrill felt at the apex. No arterial bruits in carotids. Apart from slight cough occasionally and breathlessness he had suffered no inconvenience. The superficial veins are *not* enlarged.—P. N. was seen on Nov. 13, 1884, on account of stomach derangement, with slight congestion of the liver, There was the same result as in previous case from stethoscopic examination. He has chronic short cough, but can follow after his employment as a joiner, and in May 1886, managed to pull through a severe attack of enteritis, in which he bore opiates well. The third case—P. G., æt. 20, farm labourer, consulted me on February 20, 1885. He said that six weeks previously he had had malaise, rigors, and laryngeal catarrh. His urine contained albumen from cystitis, his left tonsil was ulcerated, and he was deaf on that side, acuity nearly half. I note "hæmic bruits," but as he was so weak, having come to my surgery, I sent him to bed.

Feb. 23rd.—Trace of albumen; bronchitis both lungs. There is a pulmonary systolic bruit audible over both lungs, as in case of J. H. I need scarcely say that I was careful in searching for desquamation, so as to exclude scarlet fever.

The case did well, and apart from an occasional cough the young man suffered no inconvenience. In neither case were there dilated veins on the thorax, and had there been so, it would have been difficult to understand how the bronchial venous system could have been hampered without decided lung or constitutional symptoms. The stomach illness of P. N. was from error in diet with accompanying catarrh of the duodenum. The bruits in all the cases were rough; if they were hæmic (1) their roughness, (2) their constancy, and (3) their extending over both lungs, and being absent from usual sites, such as the jugulars, would be rather surprising. Further, there were none of the usual symptoms of anæmia, all except J. H. could do hard work; the bruits were loudest where a pulmonary bruit is usually heard. It is out of the question, so far as I am concerned, to state whether or not the state of matters was congenital in any of the cases. So far as I know, none of the patients are dead, so that an appeal to the post-mortem appearances has been hitherto impossible, but the fact that a loud pulmonary systolic bruit, diffusing itself through both lungs, here presents itself to your readers, will, I trust, lead to further investigations, or to the unearthing of previous observations. It may be asked—whence the cough, when the lung circulation was free? The jerky nature of the circulation acting on the nerves will probably explain this. Absence of aneurismal symptoms, and the diffusion of a rough bruit (systolic) over both lungs, and loudest over the pulmonary bruit site, together with the facts which I have mentioned above, lead me to the conclusion that these cases were due to pulmonary stenosis. I shall, however, be glad to learn anything that will shed more light on them.

REMOVAL OF BROKEN INDIA RUBBER CATHETER FROM THE URETHRA.

By John Small, L.R.C.S., Geelong.

At 1 a.m. on November 10th, 1886, I was called to a case of retention of urine in a man of sixty years. Thirty ounces of urine were withdrawn through a silver catheter (No. 12), without difficulty.

Next day some more urine was drawn off, and a pure rubber soft catheter (Jacques' No. 9) was given to the patient, with instructions to use it regularly every eight hours.

On the night of the 28th November, I found him waiting in my consulting room, in considerable pain, and he gave the following account:—At 9 a.m. that day, he had passed the catheter as usual, and had withdrawn an average quantity of clear urine, the bladder he noticed beginning to contract well. At 6 p.m. he tried to pass the catheter again, but found some obstruction, which he attempted to overcome by forcing the instrument onwards, but when it had disappeared into the urethra (without any urine passing through) he began to be alarmed, and tried to withdraw the catheter, and failing, pulled more strongly, with the result of leaving a large portion of the instrument in the urethra, only five or six inches coming away. He now said that he felt it was in his bladder.

Using a No. 6 silver catheter as a probe, I could feel the missing part, a little in front of the triangular ligament, and by exerting deep pressure into the perinæum, a well defined lump could be recognised.

Treatment.—After placing the patient in the erect position resting against a table, and warning him to cry out immediately he felt any pain, I proceeded with a pair of œsophageal forceps (curved something like a prostatic catheter, and opening vertically) to try and extract. After several failures, the forceps kept their grip, and the catheter was drawn several inches forward. The forceps then slipped, and with no other forceps could I get it further than one inch from the meatus. There was now some hæmorrhage. After carefully manipulating through the skin, I decided that the catheter was firmly doubled on itself, forming too large a mass, plus forceps, to pass through the canal. After waiting a few seconds, I passed a properly bent probe into the urethra, and by careful manipulation causing a little pain, got it through.

Extraction was then easy. The patient was then relieved by having his urine drawn off through a No. 6 soft catheter, and he then insisted upon walking home.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, MARCH 2ND, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. Jackson, Allen, Jamieson, Jonasson, J. W. Barrett, J. W. D. Hooper, J. F. Wilkinson, Clendinnen, A. J. Wood, G. A. Syme, Sparrow, Courtenay, Ruddle, J. Williams, J. A. Robertson, Joyce, J. P. Ryan, O'Sullivan, Couper Johnstone, Bennie, Workman, Moore, Daish, Barker, Brett, Webb, Doyle, and Kenny.

The President, Dr. J. WILLIAMS, occupied the chair.

The HON. SECRETARY expressed his regret that formal notice of election had not been sent to the last new members, as the stock of printed forms had been exhausted, and the Committee had been considering whether some alteration of the form were not desirable.

LETTER TO THE COMMITTEE OF THE WOMEN'S HOSPITAL.

The HON. SECRETARY reported that he had addressed a letter to the managers of the Women's Hospital, in the following terms:—"Ladies and Gentlemen, I have the honour, by direction of the Committee of the Medical Society of Victoria, to express their regret that leave of absence has been refused to Dr. Balls-Headley. Such leave of absence has been regularly accorded in past time to the physicians and surgeons of the various hospitals in and around Melbourne. It enables them to gain fresh health, and to acquaint themselves with the latest improvements in medical science in the older centres of thought. The refusal of such leave of absence is, in the opinion of the Committee of the Medical Society, an ungracious proceeding, in view of the valuable services rendered to the hospitals by the Honorary Medical and Surgical Staff."

The receipt of the letter had been acknowledged by the Hon. Secretary of the Women's Hospital.

New Members.

The following gentlemen were elected members of the Society:—Dr. Marcel Crivelli, M.D. Paris, of South Melbourne, proposed by Dr. J. P. Ryan, and seconded by Dr. Balls-Headley; and Dr. James McImery Pardey, M.B., B.S. Melb., of Launceston, proposed by Dr. J. Williams, and seconded by Professor Allen.

One gentleman was nominated for election at the next monthly meeting.

The following paper was then read:—

ON DIGESTIVE FERMENTS.

By James W. Barrett, M.B.

Demonstrator of Physiology and Histology in the University of Melbourne.

It has long been recognised that the inability to digest food, on the part of persons recovering from severe illnesses and in other morbid conditions, is a serious impediment to their rapid restoration to health, and that in those cases in which food cannot be administered by the mouth, the supply of nutriment to the system in the form of enemata is usually effected in an unscientific and unsatisfactory manner; in both cases the food for the most part is incapable of being absorbed, and consequently is to the system almost valueless.

My object this evening is—1. To remind you very briefly of the manner in which normal digestion is effected. 2. To show the manner in which the difficulties with regard to food and to enemata can be overcome. 3. To explain the manner in which digestion may be facilitated by the introduction into the stomach of ferments, or of ferment containing foods. 4. And finally, to demonstrate the process of artificial digestion as effected by zymine (Fairchild's Extractum Pancreatis), and Kepler Extract of Malt Preparations.

Nutritive foods may be divided into three classes—the nitrogenous foods, the carbo hydrates (sugars and starches), and the fats. The nitrogenous bodies are of three kinds, the proteids or albumens, the albumenoids, such as gelatine, and the nitrogenous metabolites. The latter two sets of bodies usually exist in foods in relatively small proportions, and are not directly concerned in peptonisation. As a result of their digestion, two bodies named leucin and tyrosin are usually produced, which effect a subsidiary purpose; therefore, for all practical purposes, in considering the digestion of nitrogenous bodies, we have to treat with simply the proteids or albumens, of which the casein of milk is a fair type.

Also in dealing with the fats it is unnecessary to deal with the fatty acids, inasmuch as fats are usually taken into the body in the form of neutral fats.—Ex. butter.

Normally the albumens are partially converted into peptone in the stomach, and so rendered capable of being absorbed; but when the unconverted or partially converted albumens are subjected in the small intestine to the action of the ferment, trypsin, of the pancreatic juice, the conversion is completed. The action of trypsin on albumen is by some believed to be more energetic than that of pepsin, and differs from it in that it takes place to the best advantage in an akaline medium.

The sugars and starches, after undergoing some partial change in the mouth, are converted into grape sugar (glucose) in the small intestine by the ferment amylopsin of the pancreatic juice. The fats are almost unaffected until they reach the small intestine, where they are subjected to the action of the combined pancreatic and biliary secretions, and are then slightly saponified and completely emulsified. Therefore, the digestive process, when surveyed in outline, may be resolved into:—

1. The peptonisation of albumen.
2. The conversion of sugars and starches into glucose.
3. The emulsification of fats.

Although slight absorption of foods may take place in the absence of digestion, yet, for practical purposes, it may be stated that foods not so digested are useless for nutritive purposes. When then invalids are in such a condition that the different secretions are imperfectly formed, that the ferments trypsin, pepsin, amylopsin, are formed in insufficient quantity, or not at all, or when catarrh interferes with the natural acidity of the stomach, then it is obvious that the value of the food introduced can only be proportional to the conversion these ferments and secretions are then capable of effecting.

It seems that the grape sugar and peptone can be absorbed by any of the gastric or intestinal veins, from the cardiac end of the stomach to the anus, but that the absorption of fats is limited to that part of the small intestine which is supplied with lacteals. It therefore follows that the value of nutritive enemata, containing undigested food, is exceedingly problematical, as but little absorption of albumen or fat can take place.

The value of the ordinary enema is dependent partly on the fluid constituents, and partly on the presence of certain crystalloid bodies (Metabolites), which play subordinate parts in the nutritive economy.

Since these facts have been long recognised, it is not surprising that very many attempts have been made to pre-digest foods, both for ingestion and for use in enemata; but the process has never become general, because it has usually been much too elaborate in character, and the attempts have been made mostly with gastric juice, which digests but one class of foods, and that only in an acid medium. It was the recognition of this fact that caused Geo. Harley to remark in 1857:—"That if a perfectly pure extract of the pancreas could be obtained, it would prove the greatest boon ever conferred on suffering humanity; and also that it would be an invaluable substance to those suffering from indigestion." On the other hand, pancreatic juice contains ferments capable of digesting all kinds of foods, and acts with great rapidity and power. Messrs. Burroughs, Wellcome and Co. accordingly made a preparation of pancreatic juice, containing these three ferments, and have continued to manufacture it in the form of a powder, zymine (Extractum Pancreatis, Fairchild.) Thus, in place of giving milk to an invalid who is really unable to digest it, zymine is added to the warmed milk, previously mixed with a little water, and in half an hour the casein is largely converted into peptone, and the lactose into glucose, so that the milk is to a great extent digested before it is swallowed, and absorption takes place as soon as the food enters the stomach. The local effect of this absorption is to stimulate the flow of gastric juice, and possibly to effect the digestion of the undigested portion of the casein. I should add that the conversion of the whole of the casein into peptone is purposely avoided, for this reason, and on account of the bitterness of peptone. Similarly with beef tea or arrowroot, a more or less partial conversion of the respective constituents may be effected, and foods prepared for absorption with equal ease and certainty.

The great merit of the whole proceeding lies in its extreme simplicity, that is to say, that this artificial digestion may be effected by the most simple means, means so simple that any intelligent laymen can effect it with certainty, and with very little trouble. The certainty of being able to pre-digest food in this way must materially modify the treatment of many exhaustive diseases.

But there are other methods of favouring digestion and absorption besides those of artificial pre-digestion.

In the first place, properly prepared extract of malt contains not merely a large quantity of food (both albumenous and carbo-hydrates), but an amylolytic ferment, which is capable of converting starches into glucose; therefore, when ingested, it plays the double part of food and ferment.

Now, from what has been said with regard to the emulsification of fats, it will appear that the more finely divided a fat is, the less work is there for the pancreatic and biliary secretions to do, and the more readily is the absorption effected.

It will be remembered that extract of malt contains albumens and carbo-hydrates; the Kepler extract is combined with cod liver oil in such a manner that the oil is molecularly incorporated with the extract, that is to say, it is so finely divided that no globules of oil are visible, even under a most powerful objective. Thus the solution of cod liver oil in malt contains all of the three kinds of foods; two of them already digested and fit for absorption. In addition, it contains a diastatic ferment, so that I think I am justified in stating that from a physiological point of view, it is a most perfect food.

Again, should it be necessary to assist digestion, in case of dyspepsia due to deficient gastric or intestinal secretions, the zymine, or if desired, Fairchild's pepsine in scales may be introduced in the form of tabloids, and the actions of the ordinary secretions supplemented. It would seem at first sight anomalous, that zymine introduced into the stomach should assist in peptonisation, but the reaction of the stomach is not distinctly acid for from 30 to 40 minutes after food is first ingested, and zymine continues to exert its influence until the acidity is pronounced.

I now come to the last part of my subject, and will endeavour to show you the changes these preparations are capable of effecting.

1. Here is a mucilage of arrowroot starch, prepared by boiling the starch in water during a few minutes. Added to one portion this mucilage, which is maintained at a temperature of 100° F. (approximately) are a few minims of extract of malt; and to the other, a few grains of zymine. You will note that in each case the viscid mucilage becomes immediately much thinner, and at the end of twenty minutes, you will see that in place of the blue reaction, which starch gives with iodine, there will be exhibited the red colour, due to the presence of a body, erythro-dextrine intermediate between starch and glucose. The application of the Fehling test will show also that glucose is present in the solution,

so that in twenty minutes the starch has been converted into glucose and the intermediate product dextrin, by both the ferment zymine and by the food extract of malt.

2. There is here a pint of milk with a little water mixed, to which zymine gr. v. is added; the mixture will be kept at a temperature of 100° to 105°, when peptonisation will proceed rapidly, and at the end of half an hour, will be well advanced. On adding strong H.Cl. to this peptonised milk no coagulation will occur, but on adding H.Cl. to fresh milk the coagulation will be obvious.

The sugar of milk (lactose) is probably converted into glucose during the process. For general purposes in peptonising milk bi-carbonate of soda is added, partly to cause the milk (cow's) to become alkaline in reaction, and partly to prevent the casein from clotting on boiling to stop the digestion.

In these three experiments, there is ample evidence of the power of zymine to digest albumens and starches, and of the diastase in extract of malt to digest starches.

A demonstration of the action of zymine on meat is not possible, because of the length of time taken in the process, but the specimens exhibited exemplify the results of the process.

I have said and shown enough I think to demonstrate clearly that these digestive ferments are active and reliable, it only remains for me to say that special directions for the digestion of different foods are published, and that the practice of artificial digestion has been reduced to a rule of thumb.

The following specimens were exhibited :—

1. Some beef tea, which had been subjected to the action of zymine during four hours, at a temperature of 100° F., approximately. The presence of peptone was demonstrated by the sulphate of copper test.

2. An equal quantity of beef tea, which had been treated in the same manner as No. 1, with the exception of the addition of zymine. No peptone was present.

3. A quantity of milk, which had been subjected to the action of zymine during one hour, at a temperature of 100° F., approximately. The hydrochloric acid test showed that there was but little free casein, conversion having occurred.

4. An equal quantity of milk, which had been subjected to the same treatment as No. 3, with the exception of the addition of

zymine. The hydrochloric acid test showed that the casein was not converted.

5. The products of the digestion of a small quantity of finely-divided raw beef by zymine. The meat was more or less completely dissolved, and the presence of peptone was demonstrated by the sulphate of copper test.

6. An equal quantity of meat, which had been treated in the same manner as No. 5, with the exception of the addition of the zymine. The meat was not dissolved and peptone was not present in solution.

7. A small quantity of washed fibrin which had been treated in the same manner as No. 5. The fibrin was more or less completely dissolved, and the presence of peptone was indicated by the sulphate of copper test.

8. An equal quantity of washed fibrin, which had been treated in the same manner as No. 6. The fibrin was not dissolved, and no peptone was present in solution.

9. A small quantity of meat, which had been subjected to the action of a few grains of Fairchild's pepsine in scales and hydrochloric acid during six hours. The meat was almost completely dissolved, and the presence of peptone was demonstrated by the sulphate of copper test.

10. An equal quantity of meat, which had been treated in the same manner as No. 9, with the exception of the addition of pepsin in scales and hydrochloric acid. The meat was not dissolved, and no peptone was present in solution.

11. A small quantity of starch mucilage, which had been subjected to the action of Kepler extract of malt, during one hour, at 100° F., approximately. The presence of erythro-dextrine was demonstrated by the iodine test.

12. An equal quantity of starch mucilage, which had been subjected to the action of zymine during one hour, at a temperature of 100° F., approximately. The presence of erythro-dextrine was demonstrated by the iodine test, and the presence of glucose by the sulphate of copper and picric acid tests.

The following microscopical specimens were exhibited :

1. A specimen of a popular emulsion of cod liver oil and milk characterised by the large size of the oil globules.

2. A specimen of an emulsion of cod liver oil presenting similar characters.

3. A specimen of milk.

4. A specimen of the solution of cod liver oil in extract of malt. In this no globules were visible, that is to say, the oil was molecularly incorporated into the malt extract.

5. A specimen of No. 4, which had been mixed with water to demonstrate the presence of the oil.

Dr. **Jamieson** remarked that members would all agree that the paper and the demonstration were exceedingly valuable. They would remember how much in former years practitioners depended on pepsin wine and similar preparations, and how little real help was obtained from them. Experiments carefully performed, even with the best preparations often failed to prove the existence of any active digestive influence on milk. As Dr. Barrett had pointed out, Harley's prophecy was destined to be verified, but a long time had elapsed since it was made. There was good reason to believe that reliable pancreatic preparations were now available, and that foods could be predigested without the troublesome necessity for the addition of acid. Pancreatic preparations aided the digestion of all foods, while pepsin was useful for albuminoids only. The present demonstration sufficed to prove that the pancreatic preparations possessed the powers attributed to them. Dr. Barrett had referred to the bare possibility of absorption of undigested albumen, notwithstanding the great difficulty which was experienced in passing it through animal membranes. An old observation of the speaker bore upon this point. Before the days of reliable pancreatic extracts, a very useful nutritious food was recommended, in the form of the Leube-Rosenthal enema of meat and pancreas. In one case in which this was used, the enemata regularly disappeared, and the ordinary motions were regular; but the patient became tired of the complicated process, and the experiment was tried of injecting beaten-up eggs; the eggs similarly disappeared, but it did not follow that there was an equal nutritive effect. Possibly the egg-albumen was excreted through the kidneys, though no test was employed. Such pancreatic or zymine powders as were used in the present demonstration were much more useful than bruised pancreas. He had been impressed by Dr. Barrett's reference to the long time that elapses after meals, before a distinctly acid reaction occurs in the stomach. His own reading in special physiology might be somewhat in arrears, but he questioned the fact; for if it were correct, digestion would be very tedious. Then as to the supposed peptogenic action of absorbed peptones, his own notion had been that the free secretion of acid gastric juice might rather be favoured by the preliminary absorption of dextrin. The paper as read was extremely interesting, and would fix in the minds of members the value of the predigestion of food.

Professor **Allen** said that he must congratulate Dr. Barrett on having given a pleasant specimen of a modern physiological demonstration, which sufficed to show the great advantages at the command of students at the present time. Many physiological processes, which formerly were learnt painfully from books, could now be studied practically, even by a comparative tyro. He could also congratulate Messrs. Burroughs, Wellcome and Co. on their excellent preparations of the Digestive Ferments, which were largely used for experimental purposes in the University laboratory. It must be remembered that the natural processes of digestion were by no means so direct nor so simple as the phenomena of artificial digestion which had been demonstrated during the evening; but Dr. Barrett had acted wisely in eliminating the complicated stages and by-products of digestion from his thesis, so as to show clearly the bold facts that, by the use of reliable prepared pancreatic ferments, starchy foods can be converted into grape sugar, and albumenoids into peptones. It was unquestionable that predigested foods must play a great part in future therapeutics; and it was matter for sincere thankfulness that pleasant and reliable preparations had been invented, to take the place of the nauseous pancreatic emulsions which were current even in the student-days of the speaker.

Dr. J. P. **Ryan** said that he had used these preparations for some time past, and considered them of very great utility. In typhoid fever and similar conditions, various digestive secretions are in all probability less abundant than normal. In earlier times, harm was done by indiscriminate nourishment, which was totally wrong, in the impeded state of digestion and absorption. Numbers of cases died from starvation, not because they lacked food, but because they could not digest it. The power to efficiently predigest food constituted a great advance on previous knowledge. Excellent results might be obtained with predigested milk in marasmic babies and young children, who could scarcely digest cow's milk, even though all the older methods of diluting, adding lactose, &c. were adopted. The benefits of nutrient enemata were probably over-rated; in a case of gastric ulcer he fed the patient *per rectum* for three or four weeks with different foods; but at last the rectum became very irritable, and it was only at the outset that the enemas gave relief. He therefore discontinued them, and used placebos, which acted just as well.

The President, Dr. **WILLIAMS**, said that he could only repeat what had already been said by other members concerning the paper and the demonstration. They would remind many of physiological knowledge which had grown rather rusty and out of date, and would stimulate fresh study and inquiry. The necessity for predigested foods had long been recognised, but the old forms of pancreatic emulsions and pepsin preparations were practically worthless. The introduction of the beautiful recent preparations of digestive ferments had revolutionised the administration of predigested foods. The medical profession were also indebted to Messrs. Burroughs, Wellcome and Co., for great improvements in general pharmaceutical work. It would be a gain to the Society, if from time to time physiological demonstrations were given by gentlemen who had been travelling among the more modern laboratories; and, similarly, demonstrations would be useful in pharmacy, therapeutics, dietetics, or in any other direction which would be helpful in practice. The Society was much indebted to Dr. Barrett for the demonstration, and to Messrs. Burroughs, Wellcome and Co., for their specimens and their assistance.

Dr. **BARRETT**, in reply to Professor Allen, said that he was far from thinking that digestion within the body was identical with the processes witnessed in the laboratory. He only wished to show that certain end-products could be produced in quantity, and with ease, by the use of prepared ferments. With reference to Dr. Jamieson's remarks concerning the absorption of albumen, there appeared to be some doubt in the minds of authorities; he himself had been taught that only acid albumins or peptones could be absorbed.

Mr. **SHEPPERSON**, as agent for Messrs. Burroughs, Wellcome and Co., briefly thanked the Society for the kind opinions expressed by members. Sheets were distributed to those present, giving detailed directions for the use of the digestive ferments.

The remaining ordinary business was postponed.

SPECIAL MEETING.

A Special Meeting was then held, at which it was resolved, on the motion of the President, supported by Dr. Jamieson and

Professor Allen—"That Dr. James Robertson, formerly President of the Medical Society of Victoria, be empowered to represent the Society at all meetings of kindred Associations, during his approaching visit to the United Kingdom, to the Continent of Europe, and to America." Reference was made to the eminent services rendered by Dr. Robertson to the profession and to the public as Lecturer on Theory and Practice of Medicine in the University during seventeen years, as Physician to the Melbourne Hospital during twenty-six years, and as an accomplished and high-minded consulting physician.

Hospital Reports.

MELBOURNE HOSPITAL.

A Case of Severe Laceration into the Knee-joint—Recovery, with Anchylosis of the Joint.

Under the care of Mr. E. M. James.

Reported by Mr. A. M. Hill, Dresser.

T. D., bricklayer, æt. 33, admitted into ward 18 of the Melbourne Hospital, June 21st, 1886. While working on the top of a brick kiln, the whole structure collapsed, and he was buried in the débris. On admission, patient was suffering from shock, and great pain about the lumbar region. There was an extensive lacerated wound on the outer side of the right thigh, exposing the muscles, and laying open the knee-joint. On passing the finger into the wound, the upper end of the tibia, and articular surfaces of the patella and femur could be plainly felt. Patient was anæsthetized with chloroform, and a counter-opening made on the inner side of the thigh and knee, to communicate with the primary wound. Drainage tubes were passed through the joint by way of these openings, and the joint was thoroughly washed out with carbolic lotion. The limb was supported on a back splint with two interrupted side splints, and the wounds dressed antiseptically. The limb was elevated and swung.

June 25.—Temperature 100° night and morning, pulse 132. Complains of pains in the groin and knee-joint. Is feverish and thirsty. There is much discharge of foul unhealthy pus from the joint, which was syringed with Condy's solution, and dressed under strict antiseptic precautions. Bowels open. Urine drawn off.

June 26.—A counter-opening on the inner side of the thigh liberated a quantity of sanious pus. The sinus was washed out with carbolic lotion, and a drainage tube inserted.

June 27.—Temperature 101·6° night and morning, pulse 114. Patient was delirious last night. Wounds were syringed and dressed antiseptically twice daily. Urine clear, amber-coloured, specific gravity 1020, acid; no albumen; no glucose. There is a great deal of sloughing of the soft parts in the vicinity of the knee-joint, and considerable pain.

June 28.—Temperature normal night, 99·6° morning; pulse 80, weak and compressible. Still delirious. Did not sleep last night. Wounds assuming a healthier appearance. Numerous sloughs were removed.

June 30.—Delirium still continues. He sleeps badly. Tongue moist, coated; bowels open.

July 7.—Temperature 103·4° night, 101° morning. Copious discharge of sanio-purulent fluid. Patient sweating very freely. Heart sounds normal.

July 10.—Temperature 103° night, 100° morning. Patient was carried into the garden yesterday, and allowed a smoke. Slept well last night. Wounds are studded with healthy granulations.

July 12.—Temperature 101° night, 100° morning. Pulse very feeble. Granulations slightly pale and flabby; the dressing changed to iodoform and absorbent wool. Patient's health was failing, so a mixture of iron and quinine, with digitalis, was prescribed.

July 17.—A quantity of pus was liberated from the inner side of the thigh. There are signs of bedsore over the sacrum.

July 21.—At a consultation it was decided not to amputate at present. Wet dressing to be used instead of iodoform and dry dressing.

July 25.—Temperature 102° night, 99° morning. Pulse 130. Wounds looking better. Discharge from the joint profuse.

August 4.—Temperature 100° night, 99·4° morning. Bedsore very painful and sloughing; poultices applied.

August 8.—Knee-joint still dressed twice daily; the larger drainage tubes were replaced by smaller ones. A large abscess on the outer side and lower third of the thigh was opened, and about half a pint of foul sanious pus evacuated. Patient complains of irritating cough. A mixture of senega and ammonia was prescribed.

August 16.—Temperature 100° night, normal morning. Splints re-adjusted. Great œdema along the outer and posterior part of thigh. A counter opening was made in the upper part of the thigh, to relieve tension, and to allow an exit for pus.

August 17.—Temperature 101° night, 99° morning. Had a rigor last night, with much sweating.

August 18.—Temperature 100·4° night, 100° morning. No return of rigors. Feels better this morning.

August 23.—Temperature 100° night, normal morning. Wounds in and around joint improving. Bedsore very painful and spreading. The back and side splints were removed, and the limb supported in a perforated zinc splint, and fortified with plaster of Paris. The limb heretofore has been dressed twice daily. Patient is allowed to sit up in an invalid carriage, and to be wheeled into the garden.

August 25.—A pint of pus liberated itself yesterday from the counter opening made on the 16th inst. A probe was passed into the sinus, which extended from the outer side of the thigh upwards and backwards, until within an inch or two of the upper border of the sacrum. The cavity was syringed out with carbolic lotion and a drainage-tube inserted; the wound was dressed antiseptically.

August 27.—Temperature 100° night, normal morning. Pulse 120. Had a rigor this morning. There is an abundant sanious discharge from the sinus on outer side of thigh, and the knee-joint.

August 28.—Temperature 102·4° night, 100° morning. Pulse 112. Dulness over sides of both lungs, with moist sounds and rhonchi over base of left lung. Poultices caused relief. Urine normal.

Sept. 2.—Temperature 98·6 night, normal morning. Is much better this morning; less discharge from sinuses and joint; bedsore improving.

Sept. 9.—Temperature 99 night, normal morning. Wounds doing well, granulations healthier.

Sept. 17.—Temperature 100° night, normal morning. Some of the drainage tubes were replaced by fagots of horsehair. Plaster of Paris and zinc splint re-adjusted.

Oct. 1.—Temperature normal night and morning. Appetite good, general health greatly improved. Splint re-adjusted.

Oct. 16.—Knee healing rapidly; the semi-lunar fibro-cartilages having been destroyed, anchylosis is taking place. The deep-seated sinus of thigh has nearly healed.

Oct. 24.—The remaining drainage tubes were removed, and their places taken by fagots of horsehair. The sinuses in and around the joint were syringed with iodine water and carbolic lotion respectively. Very little discharge; the bedsore is rapidly healing. The plaster of Paris splint was removed, and the limb fixed on a back splint, with two perforated side splints.

Oct. 30.—Back and side splints removed. The limb was bandaged with new flannel, saturated with moist plaster of Paris. Patient was allowed up on crutches.

Oct. 31.--The plaster of Paris bandage was cut carefully off the limb, and sinuses re-dressed. The horsehair fagots were gradually being thinned out. The flannel-plaster splint was re-applied by means of an outside bandage. The wounds continue to progress favourably.

Nov. 3.—Patient gets about very easily with his crutches. He has improved greatly in every respect. The discharge is very slight.

Nov. 11.—He was dismissed and made an out-patient to-day. The sinuses were all but healed, and the remaining fagots removed.

January 5, 1887.—He presented himself at the Hospital; all the wounds have cicatrized perfectly, and the limb looked healthy and robust. He has abandoned his crutches, and experiences no difficulty in walking. The knee-joint is entirely destroyed, firm union between the femur and tibia having taken place. He exhibits no deformity, but is unable to flex the leg on the thigh.

Two Cases of Hernia.

Reported by W. Moore, M.D. M.S.

I. *Strangulated Femoral Hernia.*

E. F., æt. 48, married, mother of some children, was brought to the Melbourne Hospital at about noon on February 1st. Her extremities were then quite cold, her face was pinched and anxious, and her pulse at the wrist was almost imperceptible. She was vomiting a thin yellow fluid, which was free from fæcal odour. Mr. E. M. James was called to see her, but found her in a dying state, and so was unable to do anything for her relief. The adminstration of ether by hypodermic injection failed to rouse her, and she died very rapidly.

The only history obtainable was that for some time she had suffered from a lump in the right groin, which caused her no trouble, and for which she never sought medical advice. Two days before death this lump became very painful, and the patient was attacked with severe vomiting. The pain and vomiting continued, and two days after the first onset of the symptoms, a medical man was called in. Recognising the gravity of the case, he advised her immediate removal to the Hospital.

At the autopsy, made a few hours after death, only the lower part of the abdomen and the right groin were examined. In the right groin, below Poupart's ligament, there was a round tumour of about the size of a bantam's egg. On cutting down carefully on to this a thin layer of soft yellowish-white lymph was exposed; this was loosely adherent to a thin membrane beneath, which was carefully cut through. This rather thin membrane was at first thought to be the sac, but proved to be the somewhat thickened cribriform fascia. The sac itself was small, rather thick, with a very narrow neck, which firmly constricted the small knuckle of intestine which constituted the contents of the sac. There was no fluid whatever in the sac, but the intestine contained in it was coated with a rather thick layer of soft yellowish-white lymph. There was no general peritonitis.

II. *Large Scrotal Hernia, with Inflammation of the Contents of the Sac.*

J. J., æt. 50, was brought to the Melbourne Hospital on the 7th February, and died at the door in a cab. He had been found alone in a house by a constable. There was no history obtainable of his illness. A post-mortem examination was made about twenty-four hours after death. There was an immense inguinal hernia in the scrotum on the left side. The scrotum reached almost to the knees, was greatly distended, and of a greenish blue colour from decomposition. No other part of the body showed marked signs of decomposition. There was a considerable amount of yellow fat under the skin. The lungs were gorged with dark frothy fluid posteriorly. The heart was enlarged, weighing 16 ounces, the enlargement being due to hypertrophy of the left ventricle; there was no valvular disease. The liver was greatly enlarged, weighing 100 ounces, pale, soft and very friable. The kidneys were large, pale and friable; their capsules peeled readily, except in certain places where a pseudo-capsule was left. The hernial sac was found to contain the cæcum and the first few inches of the ascending colon, the whole of the small intestine, except the duodenum and the upper three or four feet of the jejunum, and the whole of the mesentery, the latter being so greatly stretched that its vessels appeared almost as if dissected out. There was no constriction whatever at the neck of the sac, as the whole hand could be passed into it from inside the abdomen. The hernia was oblique inguinal. The contents of the sac had passed out of the abdomen at the internal ring, and descended in the ordinary way through the external ring, which was of immense size. The sac contained a large quantity of dirty, yellowish, sero-purulent fluid. The omentum was very dark and thickened, it was loosely adherent over the front of the intestine, dipping in between the coils in places. A band about one-third of an inch in width, and six inches in length, passed from one part of the omentum to another, and several coils of intestine had passed through the opening thus made, but there was no great pressure upon them. The intestine was of a very dark colour, and the coils were loosely adherent by soft lymph. The stomach was empty; the intestines, large and small, contained a small quantity of thin yellow fæcal matter. No constriction of any portion of the contents of the sac could be found. There was a great increase of cerebro-spinal fluid. The membranes of the brain peeled very readily, leaving widely gaping sulci. The brain substance was softer than normal.

ALFRED HOSPITAL.

Case of Multiple Neuritis.

Under the care of Dr. JAMIESON.

From notes supplied by Dr. JOSKE, Resident Physician.

D. M., æt. 62, widower, residing at New Caledonia, sheep farmer, was admitted into the Alfred Hospital (pay wards) on August 8, 1886. Was always in excellent health up till June 1, 1886. Whilst hard at work he had a sharp attack of diarrhœa, with some feverishness. To quiet the fever, he plunged suddenly into a cold bath, after which he was attacked with feverishness and vomiting. He then had cramps in his hands, first in the muscles of the right hand, especially about the thumb, then in the left hand, and shortly afterwards in the arms and legs. He soon became unable to walk, on account of the weakness in his legs, the muscles of both arms and legs wasting greatly. Has lost about two and a half stones in weight since his illness began, and has had occasional shooting pains in the legs and arms.

He is the youngest of a family of twelve, one (a sister) had some slight wasting of the muscles of her face, but lived to a good age. Parents lived to a great age.

On admission, is considerably emaciated; cannot stand, and has little strength in his hands; muscles of balls of thumbs greatly wasted away; arm and leg muscles atrophied considerably; has absolute loss of patellar reflexes; no ankle clonus; has good control over bladder and rectum; sensation is perverted; tongue clean; temperature normal; lungs resonant; heart sounds regular; pulse good; has marked filbert nails; has fibrillary twitchings in the interossei muscles of the hand, as well as in those of the ball of the thumb and the calf of the leg. Sensation was much impaired, especially on the front and inner side of the foot, and lower half of the leg.

In spite of the unfavourable aspect of the case, it was not very long before improvement set in, and on 31st August, he could stand, though with some difficulty. On September 9th, he could walk a few yards with assistance, and there was a little increase of fulness in the muscles of the arms. On September 23rd, he was reported as walking about thirty yards without stopping, and able to turn round without staggering. There was continuous improvement on the whole, though, after more exertion than usual, he complained on October 10th of feeling weaker, and of having less perfect sensation in the feet and legs, what he called a "woolly sensation." This numbness persisted, though in a less degree, all through his stay in the hospital, though he gained rapidly in strength and power of voluntary movement. At last the impaired sensation was limited to the fingers and the foot. When he was discharged on December 21st, he was in excellent health, and walked with little appearance of lameness. There was still no return of patellar reflex, and on January 16th 1887, when he came to report himself, the same was the case, and sensation was still somewhat imperfect at the ends of all four limbs. Between September 14th and this date there had been a gain of about two inches in the circumference at the middle of the upper arm, and of the leg, with proportionate increase at other parts. The treatment consisted in the use of bromide of potassium at first, and afterwards of strychnine, but he probably derived benefit chiefly from galvanisation of the limbs, to which the rapid improvement of strength and of the nutrition of the muscles might in part be ascribed.

Remarks by Dr. Jamieson.—This case is an interesting illustration of the condition known as multiple peripheral neuritis, of which a typical case was reported by me in the *Australian Medical Journal* for July last. The great emaciation and the marked fibrillary twichings might have conveyed the impression that the case was one of progressive muscular atrophy, but this idea was contradicted by the acute course, by the distribution of the wasting, which was confined to the limbs, and by the peculiarity of the associated impairment of sensation. The progress and result of the case also precluded this idea, as they did that of extensive disease of the cord or its membranes, even if the history and symptoms had been of a less doubtful character.

Australian Medical Journal.

MARCH 15th, 1887.

HOSPITAL FOR CONSUMPTIVES.

The desirability of founding another special hospital is not a question to be too summarily settled; and this particular hospital, the founding of which is now under consideration, is perhaps needed less in reality than in appearance. The suggestion as to the necessity for establishing a special institution, for the reception and treatment of cases of phthisis, became the subject of serious consideration, only when the separate question of the removal or enlargement of the Melbourne Hospital was felt to be a pressing one. It was urged, not very logically perhaps, that as consumptive cases occupy so many beds in the general hospitals, the right way of relieving the strain on these would be to provide a separate place for phthisical patients. It might at least as easily be urged that the same end would be attained by increasing the accommodation in the general hospitals, and chiefly by re-building the Melbourne Hospital on an enlarged scale and an improved plan. In that way other advantages would be gained at the same time, with avoidance of the difficulties attendant on the establishment and carrying on of a special hospital. Now, if it is to be a question of choice between leaving the Melbourne Hospital as it is, and founding a new hospital for consumptives, or of rebuilding the former in a proper manner, there can be little doubt about what should be considered the greater need. As part of a medical school, if for no other reason, the general hospital must admit a certain number of phthisical cases, and to go on receiving them into the medical wards of the Melbourne Hospital as it is, must be declared to be something worse than cruelty, after all that has been said by the physicians of that institution. In the minds of the proposers of this consumptive hospital, the desirable thing seems to be the founding of a hospital in which large numbers of cases could be treated, and there are reasons strong and many against this proposal. Every physician to a large hospital must have observed how ill-adapted the average phthisical patient is for treatment in the wards. Some no doubt improve for a time, but very many rapidly get worse, and even improvement is seldom of long duration; and the physician almost invariably feels that he fulfils his duty to a patient best by trying to get him discharged before there is a chance of a relapse. Of course, it may be said that a hospital for the treatment of phthisical patients will be specially adapted in situation, construction, and appliances for its intended purpose. But if treatment is to be carried on where the best medical skill is attainable, it must evidently be located near a large town, which in our case means near Melbourne; and whatever advantages Melbourne may possess as a place of residence, experience has shown that it does not suit consumptive cases. If then a large hospital in or near the Metropolis is in many respects undesirable, there is still left the question of providing in the best manner for consumptive cases requiring help in their sickness, or a refuge after curative treatment has become hopeless. For two classes of cases much can be done though no special institution should be founded. For persons who are lowered in health and threatened with, or only in the earliest stages of the disease, what is wanted is some place of the nature of a sanatorium in a healthy locality, where with fresh air, and perhaps light occupation, there would be abundance of nourishing food and all natural helps toward the restoration of health. But such a place would be equally suitable for persons recovering from some attack of severe illness, or broken down under the strain of overwork. The place in fact would be what we have already, a convalescents' home, and if a considerable increase of accommodation of that kind could be provided for, a great work would be done. Then for the advanced and hopeless cases, the persons who are waiting for the end, there is the Incurables Hospital, which we also have, but which is in great need of extension, even if the present demands on it are to be met. If these institutions, therefore, were to receive the support they deserve, and enlarged to twice or three times their present accommodation, not only might very many consumptive patients find what they most need, but the general hospitals would be relieved of the care of cases for which a continued residence in them has ceased to be an advantage. If, however, it is still felt that there should be an experiment in the way of a hospital for consumptives, we submit that it should be on a small scale, and that it should be in a locality selected merely on the ground of its special climatic suitability, and not because a site can be obtained without cost. But if it is not to be a Melbourne institution, it is not easy to see why Melbourne citizens should be expected to establish it, the effort to do so perhaps jeopardising the carrying out of a crying need of our own—the removal of the Melbourne Hospital.

Reviews.

THE VICTORIAN YEAR BOOK.*

The new issue of the *Year Book* has increased considerably in size, new matter of various kinds having been introduced. The volume now contains about 850 pages, and is full of valuable statistical material about Victoria and its resources. But it is not at all a dry record, or a mere array of figures, for the interest throughout is kept up by comparisons, not only between this colony and the other parts of Australasia, but also on many points with the countries of Europe and America. The section devoted to vital statistics is of course the one which most interests medical readers, and for them the work is calculated to be eminently useful. It contains very full details about marriage and birth rates, in these colonies and other parts of the world, at different periods, the results often being full of interest, and supplying materials in abundance for speculation and further inquiry. But while details on these points are more particularly of sociological interest, those appertaining to death rates and their causes cannot fail to attract the attention of medical inquirers. Among the general points discussed by Mr. Hayter is that of the apparent tendency for a high death rate, in nearly all the Australian Colonies, to recur at intervals of about ten years, as in 1866-67, and again in 1875-76. It is true that two periods hardly suffice to establish such a tendency, but we will soon have an opportunity of learning whether there is to be a third acme in the years 1886-87, of which Mr. Hayter thinks there are indications in the high rates of mortality prevailing in Queensland in 1885. In addition to the lengthy discussions, with illustrative tables, of the prevalence of phthisis, cancer, and zymotic diseases, and of infant mortality, which have been features in the *Year Book* previously, fuller details than usual are given on the subject of hydatid disease, and all through the section new points of interest are discoverable. Nearly 100 pages are given up to appendices, among which is an account of the objects and operations of the Central Board of Health, with a reprint of some of the most important documents published by that body. The usefulness of the book is greatly increased by a full and carefully compiled index, which makes its multifarious contents accessible with the minimum of trouble. J. J.

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* *Victorian Year Book* for 1885-86, by Henry Heylyn Hayter, Government Statist of Victoria. Melbourne: John Ferres, Government Printer, 1886.

PURDY ON BRIGHT'S DISEASE.*

The object of this work, according to the author in the preface, is to furnish a systematic, practical, and concise description of the pathology and treatment of the chief organic diseases of the kidneys associated with albuminuria, which shall represent the most recent advances in our knowledge on these subjects, and this object the author has been able to attain in a very remarkable degree. Systematic and well arranged the book certainly is, the different diseases are most clearly distinguished and described. Too much praise cannot be bestowed upon its conciseness. There is no elaborate and useless discussion of disputed and altogether unsettled pathological questions. All points, which from their importance demand some notice, but upon which authorities are not yet entirely at one, are merely mentioned or described in the shortest manner possible. In this way the size of the book is kept within reasonable bounds, and it is made more readable and so more useful. The methods of treatment are all very clearly described, and have for the most part the advantage of being very simple, and so the practical value of the work is increased. The author appears to have an intimate knowledge of all the recent literature on the subject, including the journalistic, and this is made great use of, and that in such a way as to very much enhance the practical value of the book. There is a remarkable absence of quotations, and yet the author clearly shows his acquaintance with all the recent additions to our knowledge on the subjects treated of. The book fittingly begins with a chapter on the subject of albuminuria. The methods of, and the necessary appliances for, testing the urine for albumen are well and fully described, and are well worth careful study. The chapter on cirrhosis of the kidney is one of the best in the book, though those on scarlatinal and puerperal nephritis are of great value, especially from the fact of their directing the attention of medical men particularly to these conditions. The book is of very convenient size, it is in large type, very easy to read, and it gives evidence of most careful revision. There are eighteen illustrations, all but one showing sections of the various morbid conditions treated of, and they are quite in keeping with the rest of the book. Altogether the book is a most valuable one, on a subject none too well understood. W. M.

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* Bright's Disease and Allied Affections of the Kidneys, by Charles W. Purdy, M.D. (Queen's University). London: H. K. Lewis, 1886.

We have received a copy of the second edition of Dr. Murrell's little book on Massage, a notice of the first issue of which has already appeared in the Journal. There have been additions made in nearly every section, and so the value of the book has been proportionately increased. It is still rather lacking in practical character, and the professional reader will not always find the exact directions he may need, about the various modes of using massage. Dr. Murrell does not seem at all inclined to lower his tone; and if it be true that massage, for women and children, can only be applied by "a thoroughly accomplished masseuse," who "must be an educated lady," with a knowledge of surface and visceral anatomy, and of physiology; who "must be a woman of refinement," and who must spend "at least two years" in training for the work, it is apparent that comparatively few can take advantage of this method of treatment, however excellent its results may be.

Extracts from the Medical Journals.

Hydrastis Canadensis.

Dr. Woltering, of Münster, confirms, in a paper published in the *Allgemeine Medicinische Central-Zeitung*, No. 47, 1886, the favourable results obtained with hydrastis canadensis by Fellner and other therapeutists of note.

The styptic virtues of the drug, especially in uterine fibromyomata, are very pronounced. Thus, Woltering saw cessation of the hæmorrhages in three cases of fibromyoma with a uterus-length of 9 and 8 ctm. In one of the cases the uterus-length had at the end of one year decreased 2 ctm. True, besides the drug, the patient had had the benefit of long-continued self-tamponage and warm washes. The remedy was ordered in pill form on account of its unpleasant taste. Ten grammes of the fluid extract can conveniently be evaporated down to about three grammes of a dry extract, furnishing an excellent pill mass. Woltering orders usually as follows:—℞. Extr. hydras. canad. sicci, 6.00; (to be prepared from fluid ext., 20.00); extr. secal. corn., ferri redacti, āā 3.00. M. F. pil., No. 120. S.—Two to five pills every three to four hours.

Of course morphine, aloes, or any other indicated remedy could be incorporated with this styptic. The above pills are taken readily and well borne, especially when taken during or after the meal. Woltering claims that neither wine, aromatics, nor liquorice cover the taste of hydrastis canadensis sufficiently.

In simple hæmorrhagic endometritis, the remedy renders also excellent service. In profuse bleeding from the lungs and stomach, however, a tablespoonful of oil of turpentine appears to be preferable.—*Therapeutic Gazette*, December 15, 1886.

Pernicious Anœmia and Bothriocephalus Latus.

Dr. Runeberg, of Helsingfors, speaking at the Berlin Congress (*Wiener Med. Blätter*, September 30, 1886), about the relations existing between pernicious anæmia and intestinal parasites, remarked that he had found bothriocephalus latus to have been the cause of numerous cases of pernicious anæmia observed in Finland. After removal of the worm, the affection, previously apparently incurable, disappeared spontaneously. Of nineteen cases of pernicious anæmia treated at the University Clinics of Helsingfors, Runeberg could trace twelve to the presence of the parasite. From 1878 to 1883—when the anthelmintic medication was introduced at the clinics—Runeberg lost nine cases of pernicious anæmia, while after that period of nineteen cases treated only one died. Runeberg advances the opinion that even other intestinal parasites, which were hitherto regarded as harmless, could produce similar results. Reyher has confirmed the observations of Runeberg, and published a pertinent paper some time ago in the *Deutsche Archiv für Kl. Med.*—*Therapeutic Gazette*, December 15, 1886.

Treatment of Diphtheritic Angina.

Dr. H. Roger and Prof. Peter, of Paris, give, in *Les Nouveaux Remèdes* of August 1, 1886, the following therapeutic hints in diphtheritic angina: In the benign form, give in the beginning an ipecac. emetic (3 to 12 grains of powdered ipecac. in an ounce of the syrup of ipecac. in tablespoonful doses) every five minutes, until emesis is produced. Apply locally twice a day lime-water, or a solution of borax or alum, or, finally, lemon-juice. In grave cases repeat the emetic once or twice, apply four to eight times daily saturated lime-water, and touch the fauces with a solution of caustic soda (caustic soda and glycerin), or with a solution of nitrate of silver (nitrate of silver, 15 grains; water, 1 ounce). In the former case the patient ought to rinse the mouth with vinegar and water; in the second case, with salt water. In both light and severe cases tonics and supporting nutriments (bouillons, beef-tea, and milk) should be freely given.

During convalescence the authors advise change of air, continuance of the supporting alimentation, and wine of cinchona. In remaining diphtheritic paralysis the electric current is to be resorted to.—*Therapeutic Gazette*, December 15, 1886.

Nomenclature of Pathogenic Micro-organisms, according to the accepted recent definitions of Dr. J. Schrœter.

Micrococcus vaccinæ (Cohn), the active portion of vaccine lymph; Micrococcus decalvans (Cohn), produces baldness; Streptococcus erysipelatis (Koch), induces erysipelas; Streptococcus diphthériticus, active in diphtheria; Hyalococcus pneumoniæ, present in croupous pneumonia; Hyalococcus Beinzii, causes the gregarina of hair; Bacillus anthracis (Cohn) produces anthrax; Bacillus tuberculosis (Koch), in phthisis; Bacillus lepræ (Hansen), in leprosy; Bacillus syphilitidis (Lustgarten), in syphilis; Bacillus typhis (Eberth), in typhoid fever; Microspora comma (Koch), induces Asiatic cholera; Microspora Finkleri (Koch), present in cholera nostras; Cladothrix Fœrsteri (Cohn), found in disease of the lachrymal ducts.

F. v. M.

University Intelligence.

MELBOURNE UNIVERSITY.

At the meeting of the Council on the 21st ult., G. A. Syme, M.B., F.R.C.S., was appointed Demonstrator of Anatomy, in place of Mr. F. D. Bird, resigned. Mr. Syme was also appointed Examiner in Anatomy, in place of Professor Halford, resigned.

On the recommendation of the Faculty of Medicine, the following regulation was adopted:—"That the Council approve of the Melbourne School of Pharmacy in terms of the new regulations for degrees in medicine, and that the Council, in respect of all instructions, commencing after the 31st day of December, 1886, do withdraw recognition of all other institutions and places formerly recognised under the old regulations. Special applications from other schools of pharmacy and other similar institution might be dealt with when received."

A letter was received from Mr. P. K. O'Hara, urging the Council to make arrangements for the admission of female students to the Medical School. It was agreed to approve of the admission of ladies to degrees in medicine, and the question was referred to the Faculty of Medicine to formulate a scheme. Ten members voted for the motion and three against, the dissentients being the Vice-Chancellor, Dr. Cutts and Mr. Ellery.

At the meeting on the 28th ult., the Faculty of Medicine forwarded the names of eight gentlemen, who had applied and were eligible for the position of Lecturer on Materia Medica, Medical Botany, and Elementary Therapeutics, which Dr. Williams had declined to accept. The ballot resulted in the election of Mr. D. Grant, M.A., M.B., C.M. Ed.

A report was received from the Faculty of Medicine, replying to certain charges which had been made against the Medical School by Mr. F. W. Elsner, F.R.C.S.I., and addressed to the British Medical Council. It was resolved that the report should be printed and circulated among the members as a confidential document.

Dr. Robertson, in accordance with notice, moved:—"That Professor Allen be paid at the rate of £100 per annum for the time that has elapsed since the transfer of the pathological collection from the Melbourne Hospital to the University, as compensation for loss sustained by the transfer."

After some discussion, the following amendment was adopted:—"That a sum of £250 be paid to Professor Allen, as a *douceur* for the services rendered by him to the University, in procuring the transference of the pathological specimens from the Melbourne Hospital to the University, it being the opinion of the Council that the duties of Demonstrator of Morbid Anatomy are included in those of Professor of Descriptive and Surgical Anatomy and Pathology." This long deferred question has thus been settled, though it cannot be said that this has been done in a very satisfactory way, or in a very gracious manner.

At the meeting on the 7th inst., the Medical Faculty wrote, stating that they had considered the letter of Mr. P. K. O'Hara, referring to the question of the admission of female students to lectures in the medical course, and had passed a resolution to the effect that if female students were admitted to the medical schools, they must fulfil all the conditions of admission to the degrees of medicine and surgery now prescribed in the case of male students.

After some discussion, the following motion was agreed to:—"1. That the Council agree with the view entertained by the Faculty, that women students in medicine shall be required to undergo the same training as is now required of male students. 2. That the Council request that the Faculty of Medicine will be good enough to supply the Council, at the earliest possible date, with the necessary details for a scheme of separate lectures for women students, in those subjects in which it is undesirable, on the grounds of decency, that the lectures should be attended by both sexes in common. 3. That it is the strong desire of the Council, that women students should, if possible, be allowed this year to enter on medical study in the University."

Letters were received from Miss Alexander, Miss Sexton, and Miss Higgins, expressing a desire to enter upon the study of medicine. It was agreed to inform the writers that the Council were preparing regulations to carry out its intention of admitting lady students.

The Faculty of Medicine reported that Professor Allen had been re-elected Dean of the Faculty for the ensuing year.

The Registrar asked the direction of the Council in regard to the fee to be charged in the medical course in certain cases. In the first year medicine the result of the alterations, recently made in the course, was that the total amount of fees was increased from £12 12s. to £15 6s. The Council had expressed no intention of increasing the fees.

On the motion of Mr. Ellery, it was decided that the fee for the first year medicine should be fixed at £12 12s.

The Registrar said that in the third year medicine a special fee of £3 3s. was charged for practical physiology, and this increased the total amount of fees from £23 2s. to £26 5s. It was agreed that the special fee should be charged.

At the meeting on the 14th inst., a communication was received from the Medical Faculty intimating that the twenty-fifth anniversary of the opening of the school would be celebrated by a lecture by Dr. Neild, in the Wilson Hall, on the 22nd inst.

The Vice-Chancellor mentioned that His Excellency desired to visit the Medical School, and that he would invite him to do so on that occasion.

The Council then proceeded to consider in private the answer to be adopted in reference to charges made to the General Council of Medical Education in England by Mr. F. W. Elsner, who had failed to pass the medical examinations.

The ordinary examinations in medicine have just been concluded, though none of the results have yet been posted. The final honour examinations, and those for the degree of M.D. begin during the present week.

The following papers were set at the recent Ordinary Examinations for Degrees in Medicine.

Senior Descriptive and Surgical Anatomy.

1. Describe the origin, course, relations, branches and anastomoses of the deep epigastric artery.

2. Describe the course and relations of the third part of the subclavian artery.

3. Describe the course and relations of the internal and external saphenous veins.

4. Describe the origin, course, relations, branches and communications of the spinal accessory nerve and of the circumflex nerve.

5. Describe the relations of the several parts of the male urethra.

6. Describe the structure and relations of the pharynx.

Physiology.

1. Describe the shapes, attachments and functions of the ossicula auditûs.

2. Give the actions of all the muscles of the eyeball and of the iris, including the nerve supply.

3. Give an account of the functions of the kidney.

4. Describe the experiments which can be made with the frog's heart.

5. Give a description of Kühne's artificial eye, and the method of using it.

Materia Medica, Therapeutics, and Medical Botany.

1. Enumerate the officinal salts of magnesium; describe their physical characters, and give their preparations and doses.

2. Describe the physiological actions and medicinal uses of nitrite of amyl.

3. Give the botanical name of the plant yielding the true ipecacuanha root, and state to what natural order it belongs. Enumerate its officinal preparations and doses.

4. Describe the medicinal actions and uses of sulphur, and give its officinal preparations and doses.

5. What is jaborandi? Give its preparations and doses, and describe briefly its therapeutics.

6. Give the doses of the following pharmaceutical preparations:—aqua cinnamomi; extractum aconiti; extractum stramonii;

extractum nucis vomicæ; extractum glycyrrhizæ liquidum; infusum digitalis; liquor ammoniæ acetatis; liquor ferri dialysatus; liquor strychninæ hydrochloratis; mistura sennæ composita; pilula aloes et assafœtidæ; pilula saponis composita; pulvis ipecacuanhæ compositus; spiritus juniperi; succus belladonnæ; syrupus scillæ; tinctura aconiti; tinctura cannabis indicæ; tinctura belladonnæ; tinctura opii; vinum antimoniale; vinum colchici.

PATHOLOGY.

1. State what you know concerning colloid degeneration.

2. Describe minutely the changes which occur in an artery ligatured in continuity.

3. Describe the general properties, chemical composition and microscopic character of pus.

4. Describe the macroscopic and microscopic changes which occur in acute catarrhal pneumonia.

5. Describe the proximate and remote results of aortic valvular obstruction.

6. Describe the general character, microscopic structure and usual sites of enchondromata, and specify the secondary changes to which they are liable.

OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

1. Give a description of the structure of the ovary, and especially of the formation and growth of the Graafian follicle and its contents.

2. Give an account of the management of a case, in which prolapse of the funis occurs when the os is still little dilated.

3. Describe the treatment of a case of retained placenta.

4. Detail the most important points in the differential diagnosis of ovarian cyst and fibro-cystic tumour of the uterus.

5. What are the chief causes of menorrhagia, and what are the efficient modes of treatment?

6. Describe the symptoms and treatment of thrush in an infant, indicating at the same time any conditions which may be mistaken for it.

SURGERY.

Fifth Year.

1. What are the characteristic appearances of the ordinary "inflamed ulcer" of the leg? State its causes and treatment.

2. What are the causes, symptoms, and probable effects of acute non-specific periostitis of the tibia? State the treatment to be adopted.

3. What is a "hernia" of the testis? Describe its nature, the mode in which it arises, and the appropriate treatment.

4. What are the signs and symptoms of chronic osteo-arthritis (rheumatic arthritis) of the knee-joint? Describe the pathological changes that may be seen after death.

5. Describe minutely the treatment of a patient who has received an incised wound in the throat which has opened both the trachea and the œsophagus; the treatment of the wounds, the manner of feeding the patient, and the position in which you would place his head.

6. Describe the signs, symptoms, and treatment of simple cutaneous erysipelas. State the differential diagnosis between this disease and scarlet fever.

THEORY AND PRACTICE OF MEDICINE.

Fifth Year.

1. What are the principal causes of enteritis? Describe symptoms and treatment.

2. Describe the symptoms and physical signs of the early stages of pulmonary phthisis.

3. Describe the causes, symptoms, and physical signs of a case of acute pericarditis.

4. What are the causes, symptoms, and terminations of cirrhosis of the liver? Give general treatment.

5. Describe the usual features of a severe case of sunstroke—with appropriate treatment.

6. What are the usual causes of death in typhoid fever?

FORENSIC MEDICINE.

1. Mention the organs which decompose late, placing them in the successive order of their change.

2. What are the several methods of examining supposed blood-stains?

3. Describe the post-mortem appearances in death from starvation, mentioning especially such as have been pronounced to be conclusive signs.

4. Enumerate all the phenomena (in the dead body) of recent delivery, and say what are the conditions which modify these appearances.

5. It is stated by some authorities that the presence of water in the stomach is conclusive evidence of death from drowning, and that its absence negatives such a belief. What, in your judgment, is the proper opinion to hold on this point?

6. What poisons have the effect of retarding decomposition, and what of accelerating it?

7. What are the symptoms and post-mortem appearances in poisoning by tartar-emetic?

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee, on the 22nd ult., Mr. Gregory, pursuant to notice, moved the following resolution:—"When the offices of physicians and surgeons to the hospital next become vacant by effluxion of time, one physician and one surgeon to the in-patients shall be appointed by the committee on the recommendation of the Council of the University of Melbourne; and as vacancies from time to time occur in the offices to which the committe may so appoint, such vacancies shall be filled up in like manner; and every physician or surgeon so appointed shall hold office subject to the bye-laws of the hospital, but shall be removable by the committee at any time or on the written request of such Council, and the rest of the physicians and surgeons shall be elected by the governors."

If this amendment of the bye-law were carried, it would necessitate a corresponding alteration in bye-law 55, which would then read as follows:—"If any vacancy occur in the office of physician to in-patients, or of surgeon to in-patients, 'not being appointed by the committee upon the recommendation of the Council of the University,' from any other cause than effluxion of time, the senior physician to out-patients, or the senior surgeon to out-patients, as the case may be, shall, according to the order of his length of service in the hospital, or in the case of equal lengths of service, then, as the committee may determine, succeed to such vacancy for the remainder of the term thereof, and shall thereby vacate his former office."

Mr. Gregory stated the reasons which could be urged in favour of the motion, adding that the rights of the Committe would be protected by retaining the power of appointment, although the recommendation of the University Council would be followed almost as a matter of course.

After some discussion it was agreed to postpone the consideration of the matter, and submit the question to the governors at the time of the election of the medical officers in August next. This was done, although it was pointed out that if the Committee did not resolve to change the system of electing the medical staff prior to August, no change that might be resolved upon by the governors could take place for four years, the term for which medical officers were elected by the governors.

The consideration of a motion, requiring resident medical officers to serve the institution for twelve months, under penalty of losing their allowance of £50 per annum, was postponed, that it might be taken up along with another, referring to the remuneration of the resident medical officers.

The Building Committee reported that the alterations and additions to the morgue and pathologist's rooms had been faithfully carried out, and embodied many improvements. Among these are large fans, which are being fitted up to withdraw into a furnace the foul air from the post-mortem room.

At the meeting of the Committee on the 18th inst., a letter was read from Dr. James Robertson, resigning his office as one of the honorary physicians of the Hospital, he having resolved on taking a trip home for the benefit of his health. He had been for 26 years connected with the institution, and should continue to take a deep interest in the Hospital when no longer officially connected with it. He hoped to hear before long that a new hospital would be built on a more elevated and spacious site, one in every way adapted for the treatment of the sick under the best conditions, and worthy of the colony.

The Chairman said that it was worth considering whether they should not propose to give Dr. Robertson leave of absence, and ask him to continue a member of the honorary staff.

The Secretary pointed out that this could not meet the difficulty, as the elections to the medical staff would come on in August. Dr. Robertson's term of office ended then.

The resignation was accepted, the following motion being then unanimously adopted :—"That the Committee, recognising the conspicuous services rendered to the institution by Dr. Robertson, place on record their great appreciation of the benefits conferred on the Hospital, and that it be a recommendation to the governors that Dr. Robertson be placed on the list of honorary governors for life."

Dr. A. J. Wood, who has been a resident physician, wrote tendering his resignation, on appointment as resident medical officer to the Children's Hospital. The resignation was accepted.

When the question of the tenure of office and remuneration of resident medical officers came up for consideration, it was resolved, after some discussion, "That in all future appointments to the resident medical staff (the medical superintendent excepted) the same shall be without salary. It was also agreed to carry out the proposed extension of the nurses' quarters, at an estimated expense of £700, and this in the face of proposals to remove the institution to another site, and in spite of difficulty in providing funds for the purpose.

It is very doubtful whether the resolution abolishing payment to resident medical officers will be found to work well. The whole question was raised by a complaint that these officers did not stay long enough, and it seems to be rather a remarkable way of meeting that complaint, to remove one of the inducements to continue till the end of the term of one year's service. Whether the office will be as eagerly sought after as heretofore, remains of course to be seen.

ALFRED HOSPITAL.

At the meeting of the Committee, on the 18th ult., the action of certain of the members, who had entered into an agreement with the Central Board for the erection of a camp hospital on the grounds, for the treatment of typhoid patients, was confirmed. A letter was received from the President of the Central Board, thanking the medical staff for undertaking the charge of patients in the camp hospital. There are now six tents, accommodating twenty-eight patients, and they are all fully occupied. The expenses for maintenance, &c., are to be met by the Central Board. Complaint has been made of the tendency, which was at once exhibited, to forward patients from parts of the Colony so remote as Castlemaine, Echuca, and Sale.

The death of Dr. Blair has made a vacancy on the Honorary Surgical Staff, which will be filled by election at the meeting of the Committee on the 18th inst.

Vital Statistics.

The report of the Government Statist on the vital statistics of Melbourne and suburbs, for January 1887, shows that the births of 1209 children, viz. 621 boys and 588 girls, were registered during the month.

The deaths registered numbered 956, viz. 510 of males and 446 of females.

To every 1000 of the population of the district the proportion of births was 3·26, and of deaths 2·58.

One hundred and twenty-five deaths occurred in public institutions.

The number of children under one year who died was 388, the total number under five years being 511.

As compared with the experience of the previous month, deaths from specific febrile or zymotic diseases increased from 185 to 206, those from constitutional diseases from 113 to 157, and those from local diseases from 279 to 369. Under the zymotic head, deaths from measles rose from 1 to 3, those from typhoid fever from 26 to 40, and those from diarrhœal diseases (which are usually prevalent in the hot weather) from 130 to 149. Under the constitutional head, deaths from tabes mesenterica rose from 10 to 20, those from acute hydrocephalus from 8 to 19, and those from phthisis from 67 to 82. Under the local head, deaths from nervous complaints rose from 87 to 100, those from heart affections from 28 to 47, those from throat and chest affections from 51 to 72, and those from bowel and stomach disorders from 75 to 122. Eight deaths occurred during the month amongst child-bearing women, as against 3 in December. Comparing these numbers with the births registered during the same period, it follows that 1 death of a mother took place to every 151 children born alive, as against 1 to every 347 such children in the previous month.

Local Subjects.

Medical Board of Victoria.—The following gentlemen have registered their qualifications:—William George McClure, Melbourne, M.R.C.S. Eng. 1847, M.D. Glas. 1847; Alfred Henry Parker, Melbourne, L. et L. Mid. R.C.P. Edin. 1870, L.S.A. Lond. 1870; Henry Stoker, Wycheproof, L.R.C.S. Irel. 1884, L. et L. Mid. K.Q.C.P. Irel. 1885; John McDonald Brennan, Corryong, L. et. L. Mid. F.P.S. Glas. 1863; Edward Harkness, Maryborough, L. et L. Mid. R.C.P. et R.C.S. Edin. 1886, L.F.P.S. Glas. 1886; Henry O'Brien Deck, Melbourne, M.B. Melb. 1886; Joseph Augustus William Wardale, Melbourne, L.R.C.P. Lond. 1872, M.R.C.S. Eng. 1872; Edward Bruce Robertson, Seymour, M.B. et Ch. M. Edin. 1872; George Marr Reid, Birregurra, M.B. et Ch. M. Aberd. 1886.

Name of deceased medical practitioner ordered to be erased from the Register:—No. 1125, John Fulford, L.R.C.P., &c.

Public Vaccinators.—The following appointments have been made:—Northcote—Edwin J. Bird, M.B., *vice* R. E. Weigall, M.B., whose resignation has been accepted; Richmond—Charles B. Duigan, L.R.C.S., *vice* E. J. Wilson, M.R.C.S., deceased; Penshurst—William S. R. Woodforde, M.B., *vice* John Fulford, M.R.C.S., deceased.

Health Officers.—The following appointments have been confirmed:—Shire of Grenville—Archibald Clarke Robinson, M.D., *vice* James Matthew Nolan, L.R.C.S., left the district; Shire of Mount Rouse—William Sidney Ridout Woodforde, M.B., *vice* John Fulford, M.R.C.S., deceased; Shire of Dimboola—James Augustus Hayden, M.R.C.S., *vice* Francis Wilson, M.R.C.S., left the district; Shire of Coburg—Carl Peter Wilhelm Dyring, M.B., *vice* William Henry Cutts, M.B., resigned.

Deputy Medical Superintendent.—Henry A. Samson, M.B., has been appointed to be a Junior Deputy Medical Superintendent, Hospitals for the Insane, from 1st March 1887, for six months, on probation.

The Trustees of the National Gallery have elected Mr. Frederick Dougan Bird, M.B. Ch. M., M.R.C.S., as Demonstrator of Anatomy to the art classes of the National Gallery.

The Annual Meeting of the Royal Society was held last evening at the hall, Victoria-street, Professor Kernot, President, in the chair. The report of the Council for 1886, which enumerated the various papers that were read and discussed during the past year, was adopted. The appended balance-sheet showed a credit balance of £555 13s. 5d. Office-bearers for the ensuing year were elected as follows:—President, Prof. Kernot; Vice-presidents, Mr. E. J. White and Mr. J. Cosmo Newbery; Hon. Treasurer, Mr. H. T. Moors; Hon. Librarian, Dr. Neild; Hon. Secretaries, Messrs. H. K. Rusden and G. W. Selby, jun.; Members of Council, Messrs. E. Bage, C. R. Blackett, A. H. S. Lewis, S. W. M'Gowan, W. H. Steel, and A. Sutherland. An ordinary meeting was then held, at which the following candidates for membership were elected:—Dr. J. J. Wild, F.R.G.S.; Mr. A. H. Jackson, and Mr. J. B. Lewis. Mr. W. H. Irvine was elected as an associate. The Librarian reported the receipt since last meeting of 250 numbers of scientific periodicals and publications.

Dr. John Blair, Collins-street East, died at his residence, after a protracted illness. He was a native of Linlithgowshire, Scotland, and was 52 years of age. He studied his profession in Glasgow and Edinburgh, becoming Licentiate of the Royal College of Surgeons of the latter city in 1857, and Fellow in 1874. He was also a doctor of medicine of the University of Sydney. He came to Victoria in 1859, and practised for some time at Northcote, but, after a while, removed to Melbourne, where, with the exception of a visit to the old country a few years ago, he has since resided. Soon after his arrival here he became connected with the Medical Society of Victoria, of which he was honorary secretary for ten years, when he was elected its president. During these years he was an occasional contributor to the pages of the *Australian Medical Journal.* In 1867, when the movement having for its object the foundation of a Prince Alfred Memorial was started, a project which eventually resolved itself into the Alfred Hospital, Dr. Blair took a prominent part in promoting its accomplishment, and, on the completion of this charity in 1870, he was elected one of the honorary surgeons, an appointment he continued to hold up to the time of his death. In this institution he has always taken great interest. He was, also, a member of the Medical Board of Victoria.

A meeting was held in the Town Hall on the 8th inst. to consider the question of erecting a special hospital for persons suffering from consumption. There was only a small attendance. His Excellency the Governor presided, and it was announced that two sites had been offered, one of 50 acres, which was understood, but not officially stated, to be near Riddell's Creek, and another of 30 acres, in the same locality. The first resolution was carried unanimously, and affirmed the necessity of a special hospital in the country for consumptives. The next resolution thanked the donor of the 50 acre site, and accepted it. To this motion objection was raised, and eventually it was amended so as to comprise both sites that had been offered, and stating that they would be accepted if the localities were afterwards approved. A third resolution appointed a provisional committee to obtain contributions and take any further steps deemed necessary. It was stated that donations to the extent of £1600 were promised, including £1000 from Mr. M. H. Davies, M.L.A.

Central Board.—At the meeting on the 18th ult., it was reported that the Prahran City Council had voted the sum of £100 towards the expenses of the Camp Hospital for typhoid cases.

At the meeting on the 11th inst., the Chairman stated that the Premier had received a communication on the subject of federal quarantine from the South Australian Government, and had transmitted it for the consideration of the board. It was urged in the letter that immediate action should be taken by the colonies to establish a joint quarantine station on some site to be mutually agreed upon. The board decided to express its entire concurrence with this recommendation, and to invite a conference of the presidents of the central boards of health in the various colonies for the discussion of the subject.

It was resolved to ask the health officer of Hotham to report on the continued depositing of night-soil in the grounds of the Benevolent Asylum, situated within the bounds of that municipality.

The Acting Government Analyst reported on biscuits, which had caused symptoms of poisoning in two children, to the effect that green colouring matter on the biscuits contained arsenite of copper, a dangerous poison. Orders were given to stop the sale.

It was reported by the President that letters had been written to the local boards of South Melbourne and Port Melbourne respectively, calling on them to take immediate steps to cause all offensive drainage, refuse, and filth to be kept clear of the Port Melbourne Lagoon. The Government will give assistance towards the cost of diverting the drainage.

The annual report on the sanitary condition of South Melbourne, for 1886, has been sent in by Dr. Haig, the Health Officer. He states that the diseases most prevalent during the year have been typhoid fever, measles, pneumonia, and diarrhœa. The number of births in 1886 was 1270; and the number of deaths 697. The increase of population from excess of births over deaths was 573. The population on the 31st December, was estimated at 36,500, and the mortality was, therefore, 19·0958 per 1000. The deaths from typhoid numbered 38, but it is not stated whether this number includes the deaths in the various hospitals of persons belonging by residence to South Melbourne. It is doubtful whether this correction is always made in the annual reports to local authorities.

BIRTHS

Bird.—On the 20th ult., at Albula, Lonsdale-st. west, the wife of Fred. Bird, of a daughter.

Ryan.—On the 2nd inst., at Yarra Bend, the wife of Dr. T. B. Ryan, of a daughter.

Schiel.—On the 25th ult., at Minyip, the wife of Dr. Hugo Schiel, of a son.

DEATHS.

Adams.—On the 12th ult., Dr. J. S. Adams, of Northcote, late of Bulla Bulla, Cranbourne, aged 69 years.

Blair.—On the 9th inst., at his residence, 101 Collins-street east, Melbourne, John Blair, M.D., F.R.C.S. Ed., aged 52 years.

Lawrence.—On the 18th ult., Edith, third daughter of Dr. O. V. Lawrence, Fitzroy, aged 18 years.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in Pamphlet form by communicating with the Publishers before the issue of the *Journal*.

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Original Articles.

SEX, IN HEALTH AND DISEASE.*

By James Jamieson, M.D.

It is no easy task to construct a scientific terminology which has any approach to exactness. The language itself may be lacking in flexibility, or may suffer from mere poverty of words. English, like most other languages, is in considerable measure defective in both ways, though its deficiencies are to a great extent compensated by its practical adaptability. More than almost any other language, it is liberal in conferring the right of naturalisation. When a difficulty is experienced in giving a name to a new branch in science, recourse is generally had to Greek, which, from its natural copiousness and flexibility, is eminently fitted to supply what is needed. One very striking want in the English language is the absence of a separate word to denote the human being, irrespective of age or sex, a word corresponding with the Greek *Anthropos*, or the Latin *Homo*. We are compelled to use the word *man* with two distinct significations, both as a member of the human race, and as an adult male. When the need arose for a term to describe that branch of science which is concerned with the natural history of the human race, the word treasury of the old Greeks was drawn on, and the term *Anthropology* constructed. In its full signification, the science of anthropology is very wide in its range, embracing the study of man, not only in his physical, but in his mental constitution; and in disease, as well as in health, on both sides of his nature. Nearly all the subjects, therefore, which are embraced in the wide range of medical study may be regarded as branches of the one great subject of anthropology. But if the study of anthropology, regarded in one way, includes the subjects of human anatomy, physiology, psychology, and pathology, it also admits of another subdivision. The members of the human race may be classified in various ways, as suits the special purpose of the inquirer—by their comparative degree of civilisation, by their colour, or by their speech. But there is one obvious division, more fixed and definite than any of these, and that is according to sex. In addition, therefore, to general anthropology, or the study of human beings, as distinguished from other animals, we might properly enough speak of *Andrology* and *Gynæcology*, as being concerned with the study of the physical and mental peculiarities of men and women respectively. By analogy, this ought to be the meaning of the word *gynæcology*; but, as ordinarily used, it has a much narrower signification, standing as it does for the study of those diseases which are peculiar to or tend specially to affect women.

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* A Lecture introductory to the Course on Obstetrics in the Melbourne University, 25th March, 1887.

I propose to spend a short time in discussing some points in connection with *gynæcology* in the larger sense of the word; in considering, *i.e.*, certain differences between men and women from the physiological as well as from the pathological point of view. These differences between the sexes are most marked after the period of puberty; but even in childhood they are sufficiently obvious, and are then as distinct, perhaps, as they are in old age. The average male and female member of the human race, in fact, resemble each other much more closely at the extremes of life than in its middle period. Mere differences of habit and mode of life, which are most distinct during the adolescent and early adult periods, may go some way to account for the greater diversity then; but probably it is chiefly due to the dominant influence of motherhood, actual or potential, on the physical and mental economy of women. The reproductive function undoubtedly has a larger place, for good or evil, in the life of woman than in that of man. It is little wonder, therefore, that peculiarities of every kind are most marked during the time when that function is in fullest activity.

It is not for me to venture to settle that great question, "Is woman mentally inferior to man?" which has been, and is likely long to be, a stock subject of discussion with members of debating societies. Of course it has pleased men to confer on the other half of the race the title of the "weaker sex," and if mere physical strength alone is meant, there can be no doubt of its truth. But since mere strength reckons for comparatively little in the sum of qualities which have enabled man to render himself lord of the world, and to make obedient servants of animals stronger than himself, that physical potency cannot be allowed to count for too much in settling the relations between the sexes. Among the savage races it certainly counts for much, just as it must have done in the remote times when our cave dwelling ancestors had to carry on a constant struggle for existence with the strange monsters which then inhabited the earth along with them. With the progress of civilisation it counts for less and less, and, now-a-days, mature persons of both sexes are inclined generally to hold that the old dispute about the relative mental superiority of men and women is rather a barren one. But, if we are to believe Mr. Ruskin, the general question about woman's superiority in all the higher mental and moral qualities has been settled long ago by the concurrent testimony of the greatest writers of all times. If any one doubts, let him read that beautiful little book, "*Sesame and Lillies,*" where he will find the proofs that whether we take Homer or Dante, Shakespeare, Spenser, or Scott, the characters represented as "infallibly faithful and wise counsellors, incorruptibly just and pure examples," are always women. And if that is not enough, and we are to appeal to the collective testimony of the wisest nations, he says, "is it not the case that the Egyptian people gave to their Spirit of Wisdom the form of a woman, and that the Greeks gave a similar embodiment to their highest ideal in Athena." There is one mental quality, especially marked in many women, which is worth mentioning, the faculty they have of making what may be called an instinctive diagnosis. They can often estimate, with great accuracy, though without any process of explicit reasoning, the character and condition of persons whom they have seen comparatively little of. This faculty is closely akin to that possessed by a few members of our profession, who bring to it a something deserving of the name of genius. It is that which enables them to come to conclusions about the nature and probable termination of obscure cases of disease, without those elaborate inquiries which less gifted persons slowly and painfully carry out. A rare faculty it is, and when supplemented by proper training and steady work, it goes to make up the kind of man whom we know as a Hippocrates or a Sydenham, a Boerhaave or a Trousseau. In part it is a native quality, and in part an acquired power, such as we can all attain to in commoner matters. It is that power of attaining results without deliberately and consciously going through all the preliminary steps, whether these be reasoning processes or muscular movements. In that respect it is akin to the instinct of the lower animals, from which it differs in having begun with painful voluntary effort, and ended in accomplishment without conscious effort at all. It is, on a higher plane, what walking is to every person, what playing on a musical instrument becomes to some, a higher instinct based on the perfection of reasoning, as these are the perfection of voluntary movement. I have referred to this one mental quality, on account of its analogy with that which enables the born physician to frame his diagnosis and prognosis, with an ease and certainty which amaze ordinary men, to whom it can in no way be taught. Whether the possession of it as a natural gift, by so many women, will allow of the growing up of a new race of great physicians, when the emancipation of women is complete, I will not venture to say, not having myself the gift of prophesy. But, independent of diversity of mental constitution, there are other differences between men and women, as regards their physical nature, which are worth referring to; questions, *i.e.*, as to relative stage in the evolution process, as to physiological and anatomical perfection, and as regards liability to disease. On all these points much might be said, of no small interest and not without importance, from the scientific and also from the specially medical point of view.

Mr. Darwin's great work on the "Descent of Man," is largely taken up with the subject of sexual selection, so largely indeed, that some one has suggested that the book might have had as a sub-title, "The loves of the birds." It is there argued that the brilliancy of colour and ornamental appendages, which distinguish the male from the female in many animal species, have been acquired in some way, as the indirect result of effort and competition among males to attract the female. Grace and ornament, therefore, are regarded as indications of advance in the development of the male animals of such species. Is it an unfair stretching of this argument, to say that the superior grace of form in the human female is an indication that, among the members of our race, the advance of development has been reversed, and that physically women have reached a higher grade of evolution than men?

It has been wickedly said that the pronounced evolutionist is always looking forward to the happy time, when, as the final stage in the progress of the species, man shall have become a toothless, toeless, hairless biped. If there is any truth at the bottom of this way of putting the matter, and some truth there doubtless is, then it is certain that women are further advanced than men. They have particularly succeeded in casting off most of the hirsute appendages, of which men are so proud, forgetting that these are but miserable remnants of the protective covering which our remote ancestors possessed, when they took shelter in trees, and struggled and fought with the wild beasts, their contemporaries, for the fish or roots on which they supported a precarious existence. Perhaps you may think all this a little far fetched, and I do not say that it is so clearly demonstrated as to be suited for comprehension by the meanest understanding. But I do venture to say, that the argument is in keeping with that for the evolution doctrine in general, which now commends itself to such a large majority of students of natural science.

Leaving again, however, points which are perhaps open to the charge of being mere hypothetical extensions of a doctrine, which is itself, on the admission of its more reasonable advocates, nothing more than a fairly well established hypothesis, we turn to matters more capable of demonstration. Physically the most striking points of difference, between men and women, are those connected with the organs which are concerned, directly or indirectly, with the reproductive function. Woman, in respect of these, is a more specialised being than man. She possesses, in a fully developed condition, two organs of prime importance in the economy, the uterus and the mamma, which in him are quite rudimentary. This greater specialisation may be but a mixed advantage to the subject of it, however indispensable for the perpetuation of the species. But there can be no doubt that, regarding the body simply as a machine, mere specialisation is both a cause of complexity and a mark of perfection, though associated with its own defects and dangers. It may rightly enough be said, that if this fuller development of the reproductive system is a proof of higher advancement, then that perfection is shared by the females of all mammalian animals, and accordingly, that too much is proved thereby. But the argument is not affected, if the organism exhibiting the increased complexity of construction has not some associated defects, which more than compensate for it, and so throw the balance in favour of the less complex individuals (the males) of the species. Whether this is true of woman, as compared with man, we have yet to see.

An essential point in the doctrine of evolution is the tendency which both plants and animals have to vary; variations thus spontaneously arising being perpetuated and possibly intensified by hereditary transmission. This tendency to vary, under the influence of changed conditions, is very marked among the lowest races, great alterations of structure being readily effected in a short time and in a few generations. The cultivation, with modification, of the bacteria of certain specific diseases, is one of the most striking and interesting examples of such changes of function, and presumably of structure, artificially produced. It is held by many pathologists and microscopists, that these morbific organisms are habitually undergoing changes of properties, even independently of man's deliberate efforts, and simply in the natural processes of cultivation. Most of the lower animals are also liable to undergo very striking changes of characters, as the result of domestication or other alteration of conditions, varieties or sub-species frequently originating and being perpetuated. Whether it be from want of consistent endeavours to influence the physical characters of any of the human races, it is certain that these races, however produced to begin with, are now very fixed. I do not know whether it would be quite justifiable to say, that the mere fact of man having attained the highest degree of development among animals, is sufficient to account for the comparative fixity of his general and racial characteristics. But if so, it would be a fair conclusion that, of the two sexes, the one which shows least tendency to vary, must be considered as the more highly developed. It has been frequently shown that variations in the muscles of the trunk and limbs, either as regards absence or irregular appearance, or with reference to origin and insertion, are commoner in males than in females, the proportion of instances, in which they are found so to vary from the assumed normal type, being about two to one. As regards the occurrence of supernumerary digits, too, there is a similar unequal liability, and to about the same extent. Congenital defects, as a whole, are also much commoner in the male sex. According to the census of 1881, there were in England 133 male idiots, to 100 female ones; and deaf mutes were also met with in the proportion of about 118 to 100. The disproportion of sexes, in respect of these defects, is even more marked in this colony, since according to the census of 1881, there were, of idiots, 203 males to 100 females; and of deaf mutes, 141 males to 100 females. Certain other congenital defects, such as spina bifida, are said to be more frequent among females, but I have not been able to find satisfactory evidence bearing on the point. On the whole, then, it is apparent that the physical organisation of the human female has obtained a greater measure of stability than that of the male, in so far as it is less liable to exhibit variations and defects, either of a slight or of a serious nature. To that extent, therefore, it must be taken as proved that, as a piece of mechanism, the female body is more perfect, as well as more completely developed than that of the male.

But this brings us to another point, the consideration, namely, of its efficiency in working, as regards liability to disease and death. And there can be no doubt that, whatever the cause or causes may be, the human female is, by nature, endowed with a higher vitality than the male. This can be shown in a general way, and without reference to any special morbid tendency. It seems to be the rule in all parts of the world, that more male than female children are born alive, and as the proportion of still-births is also much greater among them, it is further true that the male births, as a whole, preponderate to even a greater extent than comes out in registration returns. Confining ourselves to this colony, I find that, in the five years, 1880–84, the births registered were, 69,826 males to 66,605 females, or in the proportion of 104·8 to 100. But it is not long before this disproportion is to a great extent corrected by the higher mortality among male children, which is most striking at the earliest ages, when the conditions to which children of both sexes are subjected are of necessity almost identical. Taking 1884, the last year of the series, as an example, this is very clearly brought out. There were in that year 293 more male than female children born alive; but the deaths, during the first year of life, were as follows:

	Males.	Females.
Under 1 month ..	598	419
1 to 3 months ..	335	294
3 to 6 „ ..	399	293
6 to 12 „ ..	521	422
Total under 1 year	1853	1428

The result of this was that, among those who survived to the end of the first year, and indeed to the age of six months, the proportion of the sexes was reversed, more females than males being left. Between the ages of one and five years, the mortality was nearly the same in the two sexes, continuing so in fact till about the twentieth year. After that age there begins to be a distinct preponderance in the female mortality, at least during the child-bearing period, and in great part due to the perils attendant on pregnancy and its consequences. At more advanced ages the mortality among women, in proportion to numbers, is again less, and it has long been a well established fact in England, that the duration of life in women is longer, on the average, than in men, a large proportion of very old people being of the female sex. At the two extremes of life, therefore, when the differences in habit and function are least marked, the members of the female sex give proof of higher vitality, as exhibited by a greater power of resisting the complex influences which are at work in causing disease and death.

It is a difficult thing to arrive at an explanation of this higher vitality, but the fact that it is most marked in the first months of life is sufficient proof that it is an inherent quality. If it had been exhibited, here and in England, only among old women, it would have been possible to ascribe it to the fact that, in English speaking countries generally, the emancipation of women is more complete than it is elsewhere, the conditions of life having become in proportion easier. There is good reason for believing, in fact, that it is only in highly civilized communities that the average duration of life is greater in women than in men. Even in England it seems to be the case that the expectation of life, as it is called, is even greater among women, relatively to that of men, now than it was when Dr. Farr first compiled his life tables.

Taking all the circumstances into consideration, it is apparent that not only is the female organism more complex in construction, and more stable than that of man, but that it is better able to withstand the destructive influences to which both are exposed. In all these respects, therefore, it must be regarded as a more perfect piece of mechanism, and, inferentially, at a higher grade in the process of evolution.

When we come more specifically to the consideration of the influence of sex in disease, difficulties at once arise. An apparently greater proneness to disease may be owing simply to fuller exposure to its causes, and may not of necessity show anything as to a real or inherent liability. Even if we have comparative returns of cases, which are not easily got, it may not be possible to draw exact conclusions. On the other hand, if we have only the numbers of deaths to guide us, there may be the fallacy of unequal power of resistance, and consequently, a different percentage of mortality among those attacked. There are two things, therefore, to be considered, viz.:—(1) Whether, independently of habits of life and varying degrees of exposure to causes, there are diseases to which the sexes are in different degrees liable; and (2) Whether, independently of this varying liability, there is a difference in the rate of mortality, according to sex, among those who are attacked.

With reference to the first point it may be said, to begin with, that there is no disease, regarded simply as a condition, and not merely as an affection of a particular organ, which is peculiar to either sex. But it is also certain, that there are marked differences between males and females in their respective liability to many diseases, though it is only of a few of them that this difference can be described as inherent in the sex. One of the most striking instances is that of hæmophilia, what the older writers called the hæmorrhagic diathesis. It is a very obscure condition in respect of its essential nature and causes. In most cases, perhaps in the proportion of 12 or 13 to one, it affects males, and it is very markedly a hereditary disease, cases occurring in families through several generations. And it has this further peculiarity, that though the daughters of a man who is a "bleeder" are not themselves affected, their sons may exhibit the hæmorrhagic tendency in a high degree. It has also been observed that if the son of a man who is a "bleeder" is free from the tendency, his sons are generally healthy. The transmission of the structural peculiarity leading to this condition is therefore specially in the female line, though the females themselves have no more than a latent tendency. The fact that hæmophilia presents itself in early childhood is sufficient to show that it does not owe its liability to attack males to any difference in habit or conditions of life, but is actually due to some inherent vulnerability of tissues, or some natural disproportion between the blood pressure in the smaller vessels and the walls of these vessels themselves. The very obscure condition known as Addison's disease, which stands in some kind of relation to degeneration of the supra-renal capsules, is also remarkable on account of its special liability to affect men, doing so perhaps with three times the frequency that it affects women. It has also been found that the age at which it proves fatal is, on the average, later in women than in men. It cannot be said that we have any explanation, either of the true nature of the disease or of these special points in its etiology.

It is doubtful whether there is any other disease, which exhibits a similar difference in the incidence of the liability to attacks. Other diseases there are, of course, which occur among members of the one sex more frequently than among those of the other; but they are all diseases showing themselves chiefly in later youth or in adult life, and dependent in considerable measure on habits of life and other general conditions. This is strikingly true of gout, which, though in a sense hereditary, can be induced or warded off according to the dietetic and other habits indulged in. In a large proportion of cases it affects males, and when women are attacked it is, on the average, at a later age than is the case with men. When women suffer from the disease it is perhaps most frequently owing to the fact that, from natural temperament or otherwise, they adopt masculine habits or modes of life. It was remarked that gout became comparatively common among the Roman ladies with the growth of luxury in the Imperial City, and when women too often ceased to be womanly. You remember, too, Motley's picture of Margaret of Parma, with her imperious temper, her masculine appearance, her moustache, and her gout.

It would be impossible, however, in the time at our disposal, and perhaps of little practical advantage, to attempt to discuss all the diseased conditions, in which, as regards liability or fatality, there is a distinction between the sexes. The diseases of the nervous system have a special interest, in as far as there are differences almost fundamental in the nervous organisation of men and women, and to a less degree even between male and female children. It is in this class of diseases, therefore, that we may expect marked distinctions to be apparent. Contrary, however, to what might have been expected, there is little room for doubt that males are more liable to die of diseases of the nervous system, as a class, than females. This was pointed out a good many years ago by Dr. Althaus, as being true for England, and I was led to the same conclusion as to Victoria, in the course of an inquiry into the prevalence and fatality of these diseases, the results of which were published in "Brain," for October, 1880. From this it must be concluded that the more fatal forms of disease of the nervous system are commoner among males, whatever may be the case with the milder affections. There can be as little doubt that women have a more susceptible nervous organisation than men, and that minor disturbances of the so-called functional kind, as might be expected, are more easily produced. But, while the nervous temperament is specially a feminine characteristic, it is a common observation that women are as capable as men of showing calmness and self control in presence of great emergencies. And again, men are more given to alcoholic and other excesses, as well as more exposed to the struggle and stress of life, and to climatic and traumatic influences. In them, therefore, the severer organic affections might be expected to occur more frequently, and to be proportionately fatal. While hysteria, chorea, and neuralgia in most of its forms, occur with preponderating frequency among women, men are more liable to suffer from tetanus, apoplexy, inflammations of the brain and spinal cord and their membranes, and from the various forms of paralysis. But there are some affections of the nervous system, about which there is not the same agreement as about those just mentioned. It is generally held that insanity is more frequently met with among women than among men, and in England, according to the census of 1881, there is a distinct excess of female lunatics, even making allowance for the preponderance of females in the population. In this colony, in 1881, there was 1 lunatic to every 284 male persons, and only 1 to 330 females, apparently an opposite condition. The difference is in part owing to the fact that, while in Victoria males and females do not differ greatly in number in childhood and youth, the former preponderate to an increasing extent with advance in age; and insanity is specially a disease of middle and later life. If correction could be made for this element of age, in the constitution of the population, I think it likely that there would not be found to be much difference with regard to the liability to insanity in the two sexes. It is very probable that in this colony, and presumably in Australia as a whole, insanity among males, all correction being made, is relatively commoner than in England. There is more alcoholism, and more strain and excitement generally, these influences telling of course more strongly on men than women. As a matter of fact, insanity, in proportion to population, is much more prevalent in both sexes here than it is in England, and the causes mentioned are those most likely to bring about this result.

Epilepsy is another disease about which the authorities are not agreed, with reference to the influence of sex in determining its prevalence. It is generally held that males and females do not differ greatly in their liability to be attacked, but the English returns show a considerably higher mortality among males. In Victoria, in 1881, there were, according to the census returns, a considerably larger number of male than of female epileptics, both absolutely and in proportion to population, viz., 1 male to every 2569, compared with 1 female to every 3599. Here again, however, as was remarked about insanity, the excess of males among adults has to be borne in mind, as by itself going some way to account for the greater liability apparently existing among them. Though the pathology of true epilepsy is still obscure, there is reason for ascribing its cause, in some cases, to alcoholism and other excesses; and in so far as there is, in reality or appearance, a greater liability among males than females, it may as fairly be ascribed to the influence of habit and surroundings, as to sex merely as such.

In the disease known as locomotor-ataxy, the liability of males is very much greater than that of females, in the proportion of about 7 to 1, according to Eulenberg. There is a growing opinion that syphilis plays a large share in the causation of this disease; and indeed the preponderance of cases among men has been made use of as an argument in favour of that contention. The influence of sex, directly or indirectly, is certainly very marked in this affection.

The fact that tetanus and hydrophobia occur, in a large proportion of cases, among men, is best accounted for by their exposure to the exciting cause in each case. It is doubtful, however, in view of recent enquiries, whether these diseases should not be ranked with the zymotics, rather than with the special diseases of the nervous system.

With reference to the whole class of zymotics, which is a very comprehensive one as it appears in the Registrar-General's lists, it may be said that there is little indication of much influence on the mortality, from the sex of persons attacked. In the ten years, 1871-80, in Victoria, they caused the death of 15,596 males, and of 15,360 females. Nevertheless, there were tolerably marked differences with respect to some of them, though it is not easy to discover an explanation in every instance. The mortality from scarlatina, measles, and whooping cough, was very nearly on an equality, though there was a slight preponderance among females, especially as regards whooping cough. The deaths registered as due to diphtheria, were more numerous among females, 1645, as compared with 1395, but this was almost compensated for by the excess of male mortality from croup, 1034, as against 863. As most fatal cases of croup are undoubtedly of diphtheritic character, this difference is very remarkable, and the question might be raised, whether the higher mortality from croup among male children, which has been observed in other countries, is due to the different form of the larynx, which, though not so distinct in childhood, is plain enough in adults. The great excess of mortality of male over female children, in the first year of life, is chiefly due to the diarrhœal diseases, diarrhœa and dysentery together causing 5716 deaths among males, compared with only 4797 among females. Rheumatism and erysipelas, as might have been expected, are more fatal among males.

Zymotic diseases as a whole, indeed, would be considerably less fatal to females than to males, but for the mortality from puerperal fever, which ranks in this class. This is an illustration, among others, of the burden of disease and death falling on women as the penalty of child-bearing; a penalty which, though lessening, is still unduly heavy. For it by no means ends with what may be called the direct performance of the reproductive function. There is danger resulting from the possession of specialised organs, as the uterus and the mamma, working sometimes at high pressure, and again, as regards function, almost in a latent condition. Perhaps it is partly this intermittent activity, which causes the special liability of these organs to be affected with malignant disease in its various forms. It is owing to the special implication of these organs that women suffer nearly twice as much from this class of diseases as men. The influence of functional activity, and the traumatism associated with it, is very clearly brought out by the figures collected from the records of the chief London hospitals by Dr. Roger Williams ("Influence of Sex on Disease, p. 13.) It appears that, to 14 cases of cancer of the male breast, there were 1419 of the female; and to 5 cases affecting the prostate, there were 1221 involving the uterus. The great excess of cancerous disease of the tongue and lip among males, and their greater liability to attack in most other localities, do not suffice to compensate for the tendency to affection of the organs ministering to the reproductive function in women.

The conclusion of the whole matter is that, but for the diseases and injuries associated with, or resulting from the performance of that function, women would suffer much less severely from the great scourges which are yet to so large an extent the opprobria of medicine. The improvements which are taking place, both in society and in medical science, are working to the advantage of women even more than to that of the "stronger sex." In his life tables, published many years ago, Dr. Farr estimated the mean duration of the life of males to be 39·9 years, and that of females 41·9 years. A more recent estimate gives 45·3 years to females and 41·9 years to males; and, if this is correct, it is apparent that the chances of survival are growingly in favour of the female.

What it is all to lead to I do not profess to know, but it may be that the emancipation of women, for which Mill and his followers clamoured, may become more complete than he ever dreamt of. I am not one of those who seem to hold that woman's place in nature is one of complete subordination to man, though I can as little rank myself with the fanatics who appear to hold that nothing has been done to secure women's rights, until they are placed in the crudest competition with men in every walk of life. It will not be good either for them or for us, if that ever comes to be the case, and the common sense of the wisest and best members of both sexes must, in due time, lead to such a settlement as will allow women freely to learn all, and do all that their mental and physical organisation makes them fitted for, without unduly encouraging vain efforts to do those things for which man's ruder strength and lessened susceptibility make him better adapted. It has been arranged that the function of child-bearing falls on women, and if the race is to be perpetuated at all, it is apparent that the fulfilment of that function must always stand in the way of the average women preparing for, and regularly engaging in the more absorbing and laborious pursuits, which, by way of compensation, rightly fall to men. It will be an evil day for the human race, when the most energetic and intelligent women habitually devote themselves to such pursuits, and deliberately decide not to do their part in the perpetuation of the species, and the transmission to posterity of the qualities with which they are themselves endowed; for it is only on that condition that women can hope to take a large share in the practice of medicine, or any other of the more laborious professions.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, APRIL 6TH, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. Snowball, Kenny, Iredell, A. J. Wood, Allen, J. Williams, Girdlestone, J. P. Ryan, Le Fevre, Nickolls, Brett, Joyce, Springthorpe, Neild, J. Jackson, J. W. Barrett, W. Moore, Howard, G. A. Syme, Couper Johnston, F. D. Bird, J. D. Hooper, Meyer, F. J. Owen, E. M. James, Irwin, Sparrow, Webb, Jamieson, and Barker.

Dr. Youl, Dr. McCrea and Dr. Johnston Williams were present as visitors.

The President, Dr. J. WILLIAMS, occupied the chair.

The minutes of the preceding meeting were read and confirmed.

Letters were read from Professor Anderson Stuart, of Sydney University, thanking the Society for having elected him an Honorary Member, and for having requested him to act as the representative of the Society in connection with the Australasian Association for the Advancement of Science. Professor Stuart promised that he would do his utmost to promote the interests of the Society in both these capacities.

ABUSES OF CLUB PRACTICE.

The HON. SECRETARY stated that he had received the following letters from a Country Practitioner, and that the Committee had directed him to read them before the Society :—

"To Professor Allen, Secretary of the Medical Society of Victoria.

"Dear Sir,—I notice in this month's *Medical Gazette* an article on the subject of 'Club Practice,' which induces me to write to you on the subject.

"I have been in practice here for nearly a year and have been observing the custom. When I came, all the Clubs were held by one of my colleagues (the hospital doctor having none), and since my arrival it has been requested of me, or suggested to me by delegates from three separate benefit societies, that I should underbid their present doctor, an intimation being added that the 'lowest tender was mostly accepted.' The doctor in question having all along treated his club-patients with a kindness and care quite equal to that given to any of his private patients, it was to me an expression of what we have to deal with, that men would willingly, for one shilling per annum less, have thrown him over and taken a new man. The club rates are 18s. a year—some with five, others with three mile radius—and I think at least nine out of ten of the wealthiest tradesmen in the district are 'clubbers;' and the numbers are increasing, new clubs being formed on purpose to avoid doctors' fees. When I suggest to my colleague a strike against well-to-do people being included, he reminds me that an advertisement will bring a young doctor immediately. The income combined is about £300 per annum, which, with midwifery extra, would induce many a man to come. Not having underbid my colleague I am consequently an outsider in the matter, so am entitled to speak. The impertinent demands I see made by 'clubbers' on the doctors are most amusing.

"Could not something be done centrally to inform new arrivals and graduates of the system, and how it is abused? There would be few then, I should think, who would be willing to work with the clubs against medical practitioners; at present they might quite well do so in ignorance.

"As I am on the subject, I might as well mention the fees here. I have the Society's table, which is interesting to study as a contrast. We have several small townships round us, as follow: Distances and fees per visit—4½ miles, 10s. 6d.; 4½ miles, was 10s. 6d., I have raised it to 21s.; 5 miles, 21s.; 7 miles, 31s. 6d.; 10 to 12 miles (a few farmers' houses), £2 2s. and £2 12s. 6d., sometimes £3 3s. I protest to my colleague, and he tells me that if the fees are raised the few who are not in the clubs will join them—as has been done in the case we raised lately (from 10s. to 21s. for 9 miles drive).

"There must be other places in similar circumstances; I merely give this place as an example. If in the struggle for existence medical men compete against each other by lowering fees, the sole gainers will be the hard-fisted among the public.

"If this is not too long a tirade, I should be glad if you could bring it before one of the Society's meetings, and see whether any action might be taken for the colony generally.

"*February 26th.*" "I am, dear Sir, yours truly, &c.

"Dear Professor Allen,—As a postscript to my last I am induced to send you the opinion of one of the 'clubbers' here, given me privately. 'If you doctors choose to lower your profession by attending people at club-prices, you have only yourselves to blame. As long as we can get your attendance cheap we are quite justified in taking it, but mind, we don't think any more of you for it.' The speaker expressed what most of them think, although they would viciously oppose any alteration in the system. This expresses so well the business view of the matter from the people's side that I send it to you.

"*March 11th.*" "I am, dear Sir, yours truly, &c.

The HON. SECRETARY stated that many practitioners were puzzled concerning the proper action to be pursued in such circumstances, and how far they dare attempt to enforce anything approaching the scale of fees adopted by the Society. The matter could not with advantage be discussed at once, but it was open to any member to table a notice of motion on the correspondence.

LEAVE OF ABSENCE TO DR. HEADLEY.

The HON. SECRETARY reported that in consequence of the letter addressed by the Committee to the managers of the Women's Hospital, and of representations made from other quarters, the leave of absence formerly refused to Dr. BALLS-HEADLEY, had at last been granted.

NEW MEMBERS.

Dr. JOHN SMALL, L.R.C.P. et S. Ed., of Geelong, was elected a member of the Society, on the nomination of Dr. Pincott, seconded by Dr. J. W. Dunbar Hooper. Six gentlemen were nominated for election at the next monthly meeting.

ORDER OF BUSINESS.

Professor ALLEN proposed, on behalf of the Committee, that the remaining ordinary business on the notice paper should be postponed, so that a special meeting might be held to consider a letter forwarded by the honorary secretaries of the proposed Consumptive Hospital. The motion was agreed to, and the Chairman declared the meeting a special meeting for the object stated.

THE PROPOSED CONSUMPTIVE HOSPITAL.

The HON. SECRETARY read the following letter :—

"Collins Street, Melbourne,
"March 28, 1887.

"SIR,—At a meeting of the sub-committee of the 'proposed Consumptive Hospital,' it was unanimously resolved that the opinion of your Society be respectfully solicited as to the most desirable district in respect to climate, suited to consumptive patients.

"We respectfully ask you to bring this important subject before the next meeting of your Society, feeling assured that in the interests of medical science you will willingly lend the committee your assistance in deciding on a site for so worthy an object.

"We may add, for your information, that sites have been offered at Riddell's Creek and Narbethong, Black Spur.

"Awaiting your reply,
"We are, &c.,
"Jas. S. Butters, } "Hon.
"Derbin Willder, } Secretaries."

The Hon. Secretary stated that in order to allow the immediate and full discussion of this letter, the Committee had referred it to a Sub-Committee, consisting of the President (Dr. J. Williams), Dr. Jamieson, Dr. Neild, and the Hon. Secretary, with instructions to draft a series of resolutions for consideration by the Society. In order to make the discussion as fully representative as possible of the opinion of the medical profession, it had been resolved to invite the presence of Dr. Youl, President of the Medical Board of Victoria, and of Dr. McCrea, concerning whose services to the profession there was no need to speak.

The President thanked Dr. Youl and Dr. McCrea for their courtesy in attending the meeting, and called upon Dr. Jamieson to read the series of resolutions drafted by the sub-committee.

Dr. Jamieson submitted the following series of resolutions for consideration by the Society:—

"The Society is of opinion—(1) That the need for establishing a separate Hospital for Consumptives has not been shown. (2) That there is urgent need for the extension of existing institutions for the relief of the sick, and that an endeavour to found a new special hospital is calculated to interfere with efforts to extend and improve these. (3) That early cases of chest disease, tending to become phthisical, which are most amenable to treatment, must still in a large measure be treated in the general hospitals, in so far as they are suited for hospital treatment at all. (4) That for cases unmistakably phthisical no hospital, strictly so-called, is suitable as a place of residence, the less advanced cases generally benefiting most by open air life in a suitable locality, and the more advanced ones needing chiefly the comforts of home, or the benefits attainable in the Austin Hospital, or some similar institution.

"In view of these circumstances, therefore, the Society must decline to recognise the desirability of founding a hospital for consumptives to the extent of indicating any site suitable for it."

Dr. Jamieson, in support of these resolutions, spoke as follows: "It should be borne in mind that however this subject of the establishment of a hospital for phthisical patients may have been thought over in private, still it did not become a public question until the proposal to remove the Melbourne Hospital was brought under the notice of the public. Those who have been taking prominent action in the movement do not seem quite to grasp the largeness of the issue. It is not a Melbourne question, because if the institution is wanted at all, it is required to supply the needs, not of Melbourne alone, but of Victoria. (Cheers.) To gauge the probable size of such an institution they must ascertain the number of patients who die from phthisis in Victoria per annum. The returns of 1885 show that the deaths from phthisis amounted during that year to 1384, and, assuming that the ordinary duration of a case of phthisis is three or four years, the average number of phthisical patients in the Colony must be 3000 or 4000. If any large proportion of these patients is to be provided for, the promoters of the new charity are engaged in a very big affair. It is, therefore, a mere drop in the bucket to talk of putting up three or four cottages for the reception of the poor consumptive patients of Victoria. The proposal may only mean the establishment of another Incurable Hospital for a special purpose, applicable to the requirements of Melbourne alone, and satisfying only a small fraction of these requirements. The funds available for the development of charitable institutions are but limited, and there is but a poor chance of building a special Hospital for Consumptives, and of securing at the same time the due and proper extension of existing institutions, serving better, wider, and more general purposes. Money may be much more usefully employed in rebuilding the Melbourne Hospital, in extending the Austin Hospital, and in providing larger accommodation for convalescents. £100,000 sunk in these works would be spent to much better purpose than in building a special

Hospital for Consumptives. The next question which arises is, what proportion of consumptive patients would be benefited by the establishment of such an institution, or, in other words, in how far do phthisicals gain by residence in any hospital? The cases which improve are those in the very early stages, in which the disease is not often recognised. Such patients find their way into general hospitals, and either improve or drift into unmistakable phthisis. A special Consumptive Hospital in the country will not give relief at the stage when it would be useful. How seldom do cases of unmistakable phthisis benefit by residence in hospital? My custom is to do the little good that can be done during a short time, and then, if the patients have friends in the country, or any suitable place to take refuge in, to advise them to leave the hospital, almost telling them to run for their lives. Advanced cases, clearly incurable, would only die more quickly if placed in a Consumptive Hospital. Let them stay among their friends, and be cheered as much as possible by the comforts of home. Failing a proper home, they should find a suitable refuge in the Austin Hospital for Incurables, or some similar institution. The Society ought not to recognise in any way the attempt to found a separate Hospital for Consumptives at the present stage in the development of the Colony. In England such hospitals have been founded, but there the conditions are largely different. In Victoria the time has not arrived."

Dr. **Jamieson** concluded by formally moving the adoption of the series of resolutions drafted by the Sub-Committee.

Dr. J. P. **Ryan**, in seconding the motion, said that the draft resolutions together with Dr. Jamieson's statement embodied to a large extent the views of most medical men. He questioned whether any further argument were necessary. But, even taking for granted that it were desirable to found a Hospital for Consumptives, the question of site would still have to be faced. The places named in the letter were quite out of court. If a hospital were to be established, it must be placed in the Valley of the Murray, north of the Dividing Range, so as to secure a dry climate, without the sudden changes which were experienced in in coast districts; but, even there, drawbacks would be found, for the summer heat was very trying during three or four months. He concurred with Dr. Jamieson, that a Consumptive Hospital would necessarily be very extensive and costly, if it was to give any effective relief to the phthisical poor of the Colony, and that money was much more urgently required for the improvement and extension of existing institutions.

The President then requested Dr. Youl to favour the Society with his opinion on the questions at issue.

Dr. Youl said that he had little to add to the arguments adduced by Dr. Jamieson. An idea of the cost of such a hospital as that proposed could be obtained by glancing at the expenditure on Lunatic Asylums, where the weekly expenditure was 11s. 9d. per week per inmate. Multiply that amount by 3000, and see the sort of establishment which might be necessary. The sites suggested were unsuitable. No man would send consumptives to Macedon or to the Black Spur, where fogs prevailed and the soil was damp. Consumptives might be divided into two classes. The first class included the hopeless patients, with advanced cavities in their lungs; many such cases were imported; some had friends, and a weekly allowance of a few shillings to the friends might suffice for their maintenance amidst the relative comfort of home. In the absence of friends, the nearest approximation to the conditions of home should be secured by a system of boarding-out or otherwise. Anything would be better than the collection of such patients in a special hospital. To herd together even 200 or 300 such persons would be to do them all harm. On a large station thousands of cattle might be grazing and retain good health, but if even five hundred were driven in a mob together, pleuro-pneumonia was apt to break out. If sick men were crowded together, they reacted in evil fashion on one another. The second class of cases included all the curable patients, and this class was a larger one than was commonly supposed. In conducting inquests, he often learnt the results discovered at post-mortem examinations on persons formerly phthisical, who had been in the Colony for years. Cavities that had been of considerable size were not infrequently found healed. Many patients came to the Colony and got well, but not in hospitals. They required plenty of fresh air and healthful occupation in a suitable climate; he had in many cases been able to provide these requirements on various stations in Riverina, and a large proportion had reported themselves cured. Most patients in the early stages could work for their living; and the provision for them was not a matter of a week, or a month; what was required was a system like that adopted in the boarding-out of children—an organisation with a central office in Melbourne, and with agencies all over the country, preferably in connexion with Ladies' Benevolent Societies. The ladies would manage it better than men, and would have the whole strength of the Medical Profession behind them. (Cheers.) Consumptives in all parts of the Colony would thus be attended to, and would be sent to the most suitable localities, being placed when possible among their friends and relatives; their welfare would be carefully watched, and real benefit would be secured at a tithe of the cost involved in the establishment and maintenance of a special hospital. Such a hospital was unnecessary, useless and expensive; it involved a new building, with a Secretary and a large staff of officers; patients who obtained admission would drift into a hopeless state; it was better and more humane to board-out the patients while in the early stages, and by all means to endeavour to lessen the number of hopeless cases. It should not be forgotten, also, that the establishment of such a hospital would cause the consumptives of all the other Colonies to gravitate to Victoria. (Cheers.)

The President then asked Dr. McCrea to address himself to the question.

Dr. McCrea said that his views had already been thoroughly expressed by Dr. Youl. Curable cases must be distinguished from incurable. For curable cases, the indications were an open air life and all the exercise possible. In a hospital such conditions were not attainable, and were replaced by confinement and inactivity. In the early stages patients might with a little assistance follow their usual vocations in a suitable climate. Beechworth was suitable for some cases, and other advantageous localities might be found according to individual requirements. For somewhat more advanced cases, a system of boarding-out was advisable, and country farms were the best places to be found. He cited two patients with advanced phthisis, cavities, hectic, night-sweats, &c., who had permanently recovered under the influence of open-air life and abundant exercise. Provision for absolutely incurable cases might be made by adding a wing to the Austin Hospital, which was an admirably conducted Institution. A special hospital to receive all the consumptive poor would be extremely costly. The Austin Hospital, with 70 patients, costs nearly £3000 a year; and therefore it was easy to judge how large a sum would be requisite to provide for 3000 patients, or for any large proportion of that number. The proposal to build a Special Hospital for Consumptives at Riddell's Creek was simply absurd.

Dr. SPRINGTHORPE desired to read before the Medical Society the opinion given by Mr. Ellery at the meeting of the Victorian Branch of the British Medical Association. He was, however, ruled out of order on the grounds (1) That Mr. Ellery was an Honorary Member of the Medical Society, and could therefore submit his views in person if he desired; and (2) That Mr. Ellery's speech had been delivered before another Society, and was already in type for the *Australian Medical Journal.* The President stated that the Society would gladly hear Dr. Springthorpe's opinion.

Dr. SPRINGTHORPE said that the sites suggested by the Secretaries of the proposed Consumptive Hospital were the worst in the colony.

Dr. LE FEVRE said he was afraid that he represented a humble minority of one. He had been asked to act on a Sub-Committee to select a site, but he thought it would be awkward to discuss such a question with a Lay Committee, and, therefore, he had suggested a reference to the Medical Society. He endorsed much that had been said by previous speakers concerning the advisableness of providing open air treatment for phthisical patients, and of extending existing organisations; but there were many sufferers who could not get employment in the country, and many others who were unsuited for any such work. It was not proposed to herd together 3000 patients, but to provide for the few cases who lacked friends or money, and, therefore, could not obtain home comforts. For some such cases, appeals appeared in the daily papers, but some patients objected to such appeals, and for them *Homes* should be established. If the word "hospital" had been avoided, and the term "sanatorium" employed, he thought much less objection would have been taken by the Society. As to the enlargement of the Austin Hospital, if the Medical Society would make a recommendation, he would gladly support it. The proposed institution was not to be in opposition to the Melbourne Hospital. At present cases of phthisis were not admitted to that hospital. Within his own knowledge several homeless and friendless cases had been refused admittance. The establishment of a special institution would make very little difference to the Melbourne Hospital. Some site or scheme should be selected, for the matter was now taken in hand by energetic men, and would be pushed forward. If they did not like a site in Victoria, the institution might be started in another colony. There might be one sanatorium in Riverina for the winter, and another in Tasmania for the summer; but if there was a failure through the inappropriateness of the site selected, the blame might lie at the door of the Society, because it had refused to take any action in the matter. If a Cottage Hospital were established in Riverina, many patients would be cured. He had sent many to Deniliquin and had wondered at the beneficial results attained in a few weeks. It was argued that no hospital would hold all the consumptive patients in the colony, but it was better to do good to a few than to do nothing. The Melbourne Hospital could not admit all the cases of typhoid fever which came to it, but that did not lessen the value of the relief which it was able to afford. He thought that the difficulty of recognising phthisis in the early stages had been over-stated, the question was rather what to do when the disease had been detected. No difficulty ought to be met with in selecting a site; a suitable locality could be found in less than a week; if necessary, he would pay the expenses of six members to go to Riverina and select a site. (Laughter and cheers.) One speaker, whose opinion deserved every respect, compared the cost of a Consumptive Hospital with that of the Lunatic Asylums. The cost of maintaining consumptives must of necessity be larger, but on the other hand, the lunatics were too often accumulating for their life-time. The number of patients might range from a very few up to 250, according as funds were available, but would never approach 1000; but even if it did, and good were done, what did it matter? Even if it were felt desirable to reject the proposal in favour of the boarding-out system, why not send in a statement to that effect? It would be gratefully received, and might help to secure all the benefits that were desired. It was not a good course to send in such a series of resolutions without making some alternative suggestions.

Dr. **Couper Johnston** was sorry that he could not strengthen one of Dr. Le Fevre's arguments. In his experience, consumptive patients sent to the hospitals were accepted as readily as others. If they were sent at too late a stage, the medical officers had a right to judge whether they were suitable for admission or not. But one great argument in favour of a sanatorium lay in the fact that consumptive patients, when taken into hospitals, after benefiting somewhat, are discharged too soon, when their health is not properly established. If chest hospitals were so bad, how was it that Brompton and other consumptive hospitals in England had proved such successes? He would like time to consider the matter, as his own mind was not decided. Too much had been said of the depressing effects which consumptives exercise on one another. The boarding-out system was not an unmixed good; much evil resulted even among children, they were often neglected, badly treated and taught bad habits. If the Melbourne Hospital was wanted, so was an institution for the relief of consumptives.

Mr. E. M. James stated that he thoroughly agreed with every word that had been uttered by Dr. Youl and Dr. McCrea, whose long and practical experience gave great weight to their opinion. He was no advocate for focussing any disease; and though he did not wish to throw any slight on any institution such as the Brompton Hospital for Diseases of the Chest, yet he thought that we ought not to adapt our hospital policy to the necessities of a Home climate, and forget the climate in which we live. Rest was necessary for the cure of any ailment; and in phthisis, the lungs would have the greatest rest where the air was purest. How could a pure atmosphere be obtained where large numbers of consumptive patients were congregated? With reference to locality, some phthisicals do well at the seaside and others require a dry inland climate; some fare best at great elevations, others at medium heights. No general rule is applicable in all cases. If all the consumptive poor were gathered in one institution at the top of Macedon, or at the other side of the Dividing Range, the benefits arising from change would be counterbalanced by the physical evils produced by aggregation of the sick and the want of spirit engendered by the depressing surroundings. What would be gained in one way would be lost in another. Whenever possible, cases of phthisis should be kept among relatives or friends. The cases so often sent to the Colony in haphazard fashion too frequently pine away when they would do better if some even distant relative were near them. In the absence of friends, something could be done by means of a boarding-out system, directed by the ladies of the Colony, who were never backward in such good work. If one-tenth of the money to be collected were spent in this way, infinitely better results would be secured than by establishing a special hospital for consumptives. Charitable institutions were already sufficiently numerous; additions to their number tended only to pauperise the community. As Dr. Youl and Dr. McCrea had said, a large proportion of phthisical patients were able and willing to work for their living, and could at least contribute something towards it. Like the Brompton Hospital, too, the proposed institution would fill with other cases besides consumptives. In the Melbourne Hospital in 1886, 187 patients died of phthisis. It was generally stated that all the civilized world over, one person out of every seven died of this disease. If the patients, even the poor and friendless, were to be gathered into special hospitals, what accommodation would be sufficient?

Dr. **Snowball** said that the thanks of the Society were due to Dr. Le Fevre and Dr. Couper Johnston, who had undertaken the most ungrateful *rôle* of Devil's Advocates. Yet he did not think these advocates had managed to construct a fair case. He could not help picturing to himself a large hospital for consumptives rapidly emptied by the undertaker's van at one end, while new patients constantly came in at the other. The example of Brompton Hospital was not a reassuring one; it was a dreary, almost sepulchral institution, and as regards the treatment of phthisis anything but a success; all that could be said was that the patients did better there than in the back lanes of London. But no analogy could hold as between the murky fogs of London and the bright skies of Australia. One aspect of the question had not yet been noticed. According to modern scientific notions, phthisis is due to a specific bacillus, always derived from pre-existing cases; every phthisical patient is recognised as distinctly auto-infective; but it is now maintained by high authorities that every patient may also infect others. If this be true, the establishment of a large Consumptive Hospital would be most unscientific.

Professor **Allen** said that he was thoroughly in accord with the general tone of the meeting. He held that the aggregation of large numbers of consumptive patients in a special hospital, with any idea of cure, would be scientifically ridiculous and practically a failure. The enormous number of cases to be dealt with, and their usually long duration, showed that the establishment of a special hospital was not the solution of the problem, how best to provide for poor and friendless consumptives. The matter could not be dealt with as a Melbourne question; no, nor even a Victorian question. If a large sanatorium were to be established, it must become a matter of Intercolonial interest: otherwise it would be necessary to establish a sanitary cordon at the Victorian borders, with adequate powers to inspect suspicious people, and to prevent even doubtful cases from entering the Colony. It would be an evil thing to attract the phthisical poor of all the Colonies in this direction. But the main point was clear. No new charitable institution should be founded until it has been shewn that the object for which it is designed cannot be satisfied by the extension of existing institutions. From this stand-point, consumptive patients fall into several groups. Firstly, there are the acute cases, those distinctly febrile, and those suffering from acute complications. All these must necessarily be treated, like cases of other acute diseases, in general hospitals. The proposed sanatorium in the country would not affect them. Some of them die, and others recover. The latter require careful attendance for a time in convalescent homes. Secondly, there are cases at the other extreme, already hopeless; some of these require little more than shelter, and might be fit subjects for admission into the Benevolent Asylum, or might, by the payment of a small weekly sum, be kept with their friends; others, more advanced or needing more constant nursing, might be provided for in the Austin Hospital for Incurables, an institution which has already belied its name by restoring supposed incurables to active life again. Thirdly, there was the large class of cases, including patients threatened by phthisis, patients in the early stage whose disease had become partly or wholly arrested, and cases of chronic phthisis not far advanced. Hospital treatment or aggregation in a sanatorium was the worst possible event for such patients. For those slightly affected, active open air life was the sheet-anchor of hope; for those more advanced, the boarding-out system under proper supervision gave the best chance of recovery. To his mind, therefore, it seemed that a special hospital was unnecessary, that the extension of existing institutions was the prime necessity, and that the establishment of an agency for boarding-out and supervising suitable cases was the only secondary measure needed. To herd together a large number of consumptives in a special hospital, early stages mingled with later stages, would be a crying evil and a cruel wrong.

Dr. Workman said that he was not enamoured with the boarding-out system; the houses of the labouring class, which were chiefly in question, were generally characterised by over-crowding and bad cookery. More benefit would be derived from life in any well ventilated ward, with good food. No doubt Brompton Hospital was rather a horrible place, yet patients had gone there from London for six months and certainly benefited thereby. From a certain aspect, Brompton was decidedly a success. It was no argument against the establishment of a special hospital to say that it would be swamped with cases. In England, one hospital after another had been erected. He thought that the contention in favour of the establishment of a Hospital for Consumptives was not altogether without grounds.

Dr. **Neild** said that in discussing so important a subject, the Society could congratulate itself on having the assistance of such veterans as Dr. McCrea and Dr. Youl. He himself had spoken a few evenings ago at the meeting of the Victorian Branch of the British Medical Association, and had no need to repeat his remarks. But he wished to draw attention to the fact that the committee of the proposed Consumptive Hospital had endeavoured to strengthen their cause by publishing a list of names of medical men as members of their committee. Among these names were those of the President of the Society, and of Dr. Bird and others. He was informed that the names of these gentlemen were used without their permission. If it were so, the action of the promoters of the Consumptive Hospital was most reprehensible. The Society would be glad to learn the facts from the President, if he would kindly state them. (Cheers).

The President, Dr. J. **Williams**, said that a list was published in *The Argus* of gentlemen who were stated to have consented to act on the committee of the proposed hospital. The list included the names of Dr. Bird, Dr. Grant, and himself, and not only had they not consented to their names being used, but they had not even been consulted in the matter. It was not fair to seek to manufacture public sympathy in such a way. (Cheers.) It had been stated by a supporter of the proposed hospital that there were 100 patients in the Melbourne Hospital who could be accommodated in the projected institution, whereas there were only 19 suitable cases in that establishment. He had carefully looked into this matter with the Secretary of the Hospital. It was also publicly stated that the proposal to establish a special Hospital for Consumptives had been started at the annual meeting of the Subscribers and Governors of the Melbourne Hospital; but that meeting consisted of a few members of Committee, with four or five representatives of the general public. He objected very strongly to any such attempts to manufacture support for this movement. Concerning the question at issue, the various points had already been stated so thoroughly that little remained for him to say. The Brompton Hospital was intended for diseases of the chest, not for consumption only. About half the beds were occupied by consumptive patients, and the other half by cases of heart disease, bronchitis, pneumonia, etc.; in that respect, and in its large out-patient department, the Brompton Hospital was very useful; but, as to the diminution of the mortality of phthisis, it was not a success at all. If the modern views of phthisis are correct, it is a contagious disease. Dr. Youl formerly characterised the out-patient department of the Melbourne Hospital as an Exchange for Diseases; but a hospital in which doubtful, early and advanced cases of phthisis were brought together might be more dangerous still. Dr. Le Fevre seemed to find a difficulty in naming a locality for the proposed hospital within the Colony, and was forced to speak of Riverina and Tasmania. It might be questioned whether the Government of New South Wales would permit the establishment of a Hospital for Victorian Consumptives within their borders. We Victorians would certainly object to any policy of retaliation. For his own part he thought that it would be a great mistake to found a special Hospital for Consumptives. The proper system was to carry out the proposal of Dr. Youl in reference to boarding-out, and not to create a new institution.

Dr. **Workman** asked leave to state that the physicians of Brompton Hospital had stated that their records gave no evidence of the infectiveness of phthisis, except on one occasion.

Dr. **Brett** urged that a far more conciliatory letter should be sent to the promoters of the proposed hospital. Some provision must be made for consumptives. The Medical Staff of the Melbourne Hospital stated that too many consumptives were admitted, so that there was no room for patients with acute diseases. The figures given by Dr. Jamieson included not only the poor, but also the wealthy people suffering from consumption.

Dr. **Le Fevre** proposed an amendment in favour of the appointment of a committee to select a site as requested, or to suggest some other course for the relief of consumptive patients.

Dr. **Jamieson** said that the Committee of the Society felt that the Society was opposed to the foundation of the Hospital, and that it was therefore absurd to recommend a site. There was surely no lack of courtesy in saying so, and giving reasons. The published discussion would show what were the opinions of the Society as to the measures to be adopted.

The Hon. Secretary, Professor **Allen**, said that if the resolutions were carried he would consider it part of his duty to inform the Secretaries of the proposed Consumptive Hospital, that a full report of the discussion would appear in the next number of the *Australian Medical Journal.*

Dr. **Le Fevre**'s amendment was not seconded.

The motion for the adoption of the report was then put and carried, only three hands being held up against it.*

Letter of Authority to Dr. Balls-Headley.

It was moved by Professor **Allen**, on behalf of the Committee, and unanimously resolved :—" That Dr. W. Balls-Headley, Vice-President of the Medical Society of Victoria, be empowered to represent the Society at all meetings of kindred Associations, during his approaching visit to Great Britain, to the Continent of Europe, and America."

British Medical Association.

VICTORIAN BRANCH.

Ordinary Monthly Meeting.

Wednesday, 30th March.

(Hall of the Royal Society, 8 p.m.)

The President, Dr. **Willmott** was in the chair, and there were present :—Drs. Cutts, Neild, Henry, Joyce, Flett, Simmons, Black, Syme, Barrett, Ralph, Springthorpe, and Messrs. Ellery and Rudall.

Mr. **Ellery** introduced Mr. Martin, member of the Committee for the establishment of a Consumptive Hospital, as a visitor.

The minutes of the previous meeting were read and confirmed. The election was announced of G. Macansh, M.B., Ch. M. Ed., Brighton ; J. W. Barrett, M.B., Ch. B. Melb., F.R.C.S. Eng., Collins Street ; G. A. Syme, M.B., Ch. B. Melb., F.R.C.S. Eng., Melbourne.

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* The Hon. Secretary begs to acknowledge his indebtness to *The Argus* report for assistance in the preparation of the foregoing report.

Correspondence was read from the Adelaide Branch, in reference to the Congress to be held in Adelaide in August next. Papers and abstracts are to be in the hands of the Hon. Sec., Dr. Poulton, on or before June 30th. Fuller particulars have already been forwarded to individual members of this Branch by the Adelaide committee.

From the Home office, extra numbers of the Journal have been forwarded to the secretary of this Branch, so that new members may now receive the Journal immediately upon election. Thus a source of great hindrance to the successful working of the Branch has now been removed.

A letter was also received from Baron F. von Mueller, regretting his inability to be present at the meeting.

The **President** congratulated Mr. **Rudall** upon his election to the post of surgeon to the Alfred Hospital.

The discussion upon "A Consumptive Hospital for Victoria," was then opened by the President. He remarked upon the necessity for some action, the culpability of the English practice of sending out to Australia so many incurable cases, and upon the suitability of Riddell's Creek as a site for a hospital as proposed.

Dr. **Cutts** expressed his belief that a sufficient case had not been made out for such a hospital. The extension of hospitals unnecessarily pauperised and demoralised the community. The small number of curable consumptive cases would do better out of a hospital, say inland, or up in Queensland, at Roma, or along the coast between Townsville and Brisbane. The large class of incurables did not require a special hospital to end their days in.

Dr. **Neild** agreed with Dr. Cutts, unnecessary extension of hospitals had a very bad effect. In this case, such an institution would simply become a retreat for imported cases. In support of his view, he read and commented upon a letter by Dr. Jamieson to *The Age* of March 21st upon the subject. It seemed to him that syndicates were at the bottom of the present attempt to "float" a hospital. He would move a motion to the effect that "in the opinion of this Branch no sufficient reasons have been shown for the establishment of a Hospital for Consumptives."

Dr. **Springthorpe** seconded the motion, and for similar reasons to those already adduced. He further contended that even curable cases wanted very different surroundings, and might best be boarded out, or sent, by means of a fund, to suitable localities.

Incurable cases might best be treated by an extension of the Austin Hospital. Further, such a movement as was intended, meant the delay of a far more important question—the removal and rebuilding of the Melbourne Hospital, which was much more worthy of a Jubilee effort.

Dr. **Henry**, whilst agreeing with what had been said, was afraid that such a motion came too late to do any good. He instanced his experience in Germany.

Mr. **Ellery** had attended rather in the expectation of hearing the question raised as to suitability of site. He agreed, however, with the arguments he had heard, but considered that something must be done to relieve our hospitals. He would, however, simply confine his remarks to questions of site. His evidence was that well beyond the Murray Flats, so as to avoid the great night radiations and very low temperatures, or on the Queensland coast, would be generally beneficial, though no spot was suitable for all cases. Roma was suitable for some months, but far too hot in summer. If Engadin was taken as the type, we had many places equally suitable, with the substitution of eucalypts for pines; but if Madeira, Ventnor, or Torquay, with an equable moist temperature, our south coast, round Portland and Cape Bridgewater, suggested itself to him. Between Point Nepean and Dromana, on the Bay side, would be well sheltered from cold winds. In his opinion there was not a worse position in the Colony than Riddell's Creek. All the southern slopes of the Dividing Range were greatly exposed, the winds violent, and the winter apt to be wet and foggy. At Macedon, the sun appeared some half dozen days in the winter, and they often had to have fires in summer. As regarded the aggregation of patients, he had seen it at Madeira with most depressant effects, defeating all the good which the climate effected.

Dr. **Barrett** mentioned that the mortality from phthisis in Melbourne, reached 22 per 10,000, whilst for the rest of Victoria it was only 8, and that the difference must be partly due to inferiority of climate.

Dr. **Neild**, in reply to Dr. Henry, maintained that it was the duty of the Branch to discuss the matter scientifically, without reference to the manner in which the public might meet their decision.

Dr. **Joyce** supported the motion.

The motion was put and carried.

The following paper was then read:

TREATMENT OF EPILEPSY BY REMOVAL OF PERIPHERAL IRRITANTS.

By Dr. Springthorpe, M.D. et Ch. B. Melb., M.R.C.P. Lond.

The aim of this paper is to bring into more prominent notice the influence of the second great factor in the causation of an epileptic attack, viz., peripheral irritation. We are all ready enough to acknowledge the existence of the main pathological status—an over-explosibility of the cells in the cortical layers of the brain, and to attempt to arrest such over action by general remedies, and the use of a specific sedative like bromide of potassium; but it seems to me fair to say, that, in too many cases, treatment stops short at this, which may perhaps be admitted the major half, and makes no systematic enquiry into the existence or not of some peripheral irritation which may be, and often is, the starting point of all the mischief. Let us assume for the sake of illustration, that a cortical nerve cell represents a certain nervous area, surrounded with a rampart of a certain resistant power, and in communication with great numbers of similar cells, and with sensory nerves generally. All the movements and re-actions which go to form organic life are thus placed in direct communication with their nervous castles, as we may call them. In a state of organic health, intelligence is constantly being sent to this central nervous system of the state of the organic environment; these messages will be of a certain kind and intensity. In a state of health of the recipient nerve apparatus, these messages are received, examined, perhaps commented upon, registered and passed on, in obedience to the laws of healthy functional activity. All this may, and generally does, go on automatically, and without consciousness on our part. But in the state which we call epilepsy, there is a vulnerability of this rampart. Messages, which in health produce no other result than what has been just described, are often strong enough to upset the equilibrium, to flurry, so to speak, the nerve action, and to cause irregular discharges of nerve force, instead of the orderly sequence of healthy action. The occurrence of such an epileptic overflow is thus dependent upon two influences—firstly, the nerve vulnerability; secondly, the peripheral message. There are cases of course where the nerve explosibility is such that the cells seem to discharge almost spontaneously, certainly during their ordinary functional activity, when none but the ordinary messages of life are being received and registered. But there are other cases where the nerve explosibility is not so great; where ordinary messages of organic re-actions are not sufficient to originate the epileptic discharge, but when unusual messages, messages of abnormal function, or of direct external irritation, become the efficient causes of such an irregular overflow. It is to these latter that special attention is now being drawn. Even in these cases undoubtedly a specific sedative and general tonic treatment may suffice to brace up the nerve resistence to the point of averting many irregular explosions. But it is possible to imagine, and it seems equally true from a clinical point of view, that cases exist where nothing short of the *removal* of the peripheral irritant will prevent the recurrence of epileptic attacks. Hence, in nearly all cases, the detection and prevention, where possible, of sources of such irritation become of extreme value, and in many cases, it is claimed, are necessary for cure.

They may require searching for, however. Most of us are on the look-out for an ovarian or uterine irritant, and as a rule, if present, treatment is systematically, and often successfully, directed towards it. An intestinal irritant is similarly often sought for and found, as in worms, and removal of the cause produces removal of the results. Centric irritation, such as anxiety, overwork, and worry, may perhaps be omitted from our list, as partaking rather of the nature of increased nerve weakness, rather than external irritation, though in most cases both are combined. In other instances, however, it is a whole function which is deranged, and it is the message of the function, as a whole, which may best be regarded as the irritant potent in the production of epileptic attacks. How few physicians, indeed, would systematically attempt the prevention of gastric irritation, dyspepsia, or the remedying of hepatic derangement, with the aim and hope of averting attacks of epilepsy. Yet it is in this direction, it is claimed, that improvement is often to be sought, rather than in large doses of pot. bromid., other bromides, belladonna, and other drugs, acting principally on the brain.

There is, I would hope, no need for me to give specific instances of such simpler cases as ovarian, gastric, and intestinal irritation, the removal of which has led to great general improvement. Such cases come under every one's notice. Several instances, moreover, are given in the March 1886 number of the *Australian Medical Journal*, in a paper read by me before the Medical Society, on "Notes on Twenty-one Cases of Epilepsy."

Recently, however, I have had under notice several cases in which most marked benefit has followed a course of treatment directed mainly towards the improvement of the functions of the liver. One which has been under observation over four months will perhaps bear special mention, and serve to illustrate the rest.

Case.

E. B., aged 33, family history somewhat neurotic, and decidedly hepatic; personal history—free from infantile convulsions and chorea; puberty began at nine, the catamenia six months later; with puberty, fits began, epileptic in character, and occurring every few weeks; after the catamenia they took place at monthly intervals. About 1870 she was under Dr. Tracy for eighteen months, and no uterine abnormality was found; she improved somewhat; but in 1873 and 1874 she became decidedly worse, whilst under quack treatment by electricity, the fits then occurred monthly, and every three months until the last eighteen months they culminated in attacks of twenty or more spread over the catamenial week. In the last eighteen months these aggravated attacks have occurred at six-monthly intervals, and ordinary fits occurred each month, generally before the catamenia began. On seeing her last, however, I was struck by two circumstances in her case. One was the almost entire absence of any cerebral impairment, out of all proportion to her long and serious history; intelligence was good; memory practically unimpaired; there was no stupor or hebitude. This, to my mind, made the influence of some peripheral irritation an unusually prominent factor in the causation of her attacks. The other noteworthy circumstance was the strong family tendency towards liver troubles, and her own undoubted participation in that inheritance. Then again her attacks were worse in the spring and autumn, when changeable weather so often causes hepatic disturbances. Both her gastric and hepatic digestion, indeed, were unusually troublesome, and a course of treatment directed against these had proved signally successful in the case of her sister. It was indeed the improvement wrought in her sister that induced her relations, who had long since given up the case as hopeless and incurable, once more to attempt something for her. As before stated, she has now been under treatment for over four months, with one attack of petit mal., and no attack of epilepsy major at all; her general health also has materially improved. The treatment adopted has been a course of soda tarax. rhubarb and chiretta—the hst. sod. et tarax. of the Melbourne Hospital—strict attention to the prevention of flatulence and constipation, regular warm baths, and plenty of exercise. At the monthly intervals she has a few doses of bromide of potassium ready in case she thinks a fit probable, but has used them only the once. Thus, under apparently non-specific treatment, but under treatment directed to the improvement of the important liver functions, she has for the first time for 24 years passed the catamenial periods, without anything more than a single very slight attack.

This case is given as typical and suggestive, though not conclusive in itself. But it certainly promises well, and should serve to make the treatment of epilepsy by the removal of peripheral irritants more systematically studied, and more generally practised, until fuller statistics shall have definitely determined its value—a value, which, in my experience, is scarcely second to that of treating the brain lesion itself.

Dr. Neild supported the position taken up. He had frequently seen such irritation lead to mania, and believed that in many cases it was the *causa causaus*, which was too often unnoticed or untreated.

Exhibits.

The following pathological specimens were then exhibited by the Hon. Secretary:

(*a*) Enchondroma of the foot.

(*b*) Stone weighing 640 grs., of mixed character, with the bladder, and extremely dilated kidneys.

(*c*) Fœtus from a case of extra-uterine pregnancy.

(*d*) Case of cut-throat.

(*e*) Kidneys, capsules, and nerves from case of Addison's disease.

(*f*) Unusual case of pericarditis.

The meeting then adjourned.

Before the departure of Dr. James Robertson on his trip to Europe he was the recipient of quite a number of presentations. A few of his professional friends met at his house to wish him a prosperous voyage, and presented him with a valuable piece of plate. A number of his old patients also presented him with a sum of money, to be expended in purchasing some memento. A handsome illuminated address was also presented to him by the Nursing Staff of the Melbourne Hospital, with an expression of regret that he was severing his connection with the Hospital, and of thanks for his kindness during a long series of years.

Dr. Fulton was entertained at dinner by the officers of the military forces.

Hospital Reports.

ALFRED HOSPITAL.

Supra Pubic Operation for Stone—Recovery.

Under the care of Dr. O'Hara.

Reported by A. S. Joske, M.B. Ch. B.

M. C., aged 54, storekeeper, was admitted into the pay ward of the Alfred Hospital on November 29th, 1886. He has had the usual symptoms of stone in the bladder for the last four years. Is well nourished, of sanguine temperament, and weighs 12 stone. On passing a sound, a stone could be felt imbedded in the posterior wall of the bladder.

On December 8th, 1886, patient having been placed under the influence of chloroform, an incision about three inches long was made in the median line, from about two inches below the umbilicus to about one inch above the symphysis pubis. The bladder had previously been filled with twelve ounces of boroglyceride lotion, a double-mouthed catheter being used and left in the bladder. The tissues were dissected down, and the point of the catheter being thrust forwards, the bladder was opened by cutting down on its point. No rectal bag was used. Dr. O'Hara then inserted a pair of forceps, but failing to grasp the stone, introduced his finger and dislodged it, the stone being embedded in a *cul-de-sac* in the posterior wall of the bladder. The stone was about the size of a pigeon's egg, weighed 620 grains, and was phosphatic in character. The wound in bladder was closed by deep cat-gut sutures; the superficial one by horse-hair, and was dressed antiseptically. The catheter was left in the bladder for drainage. The temperature rose to 101·6° on the night of operation, but the patient was comfortable.

On Deeember 9th there was some slight tenderness over the wound. The bladder was washed out with a solution of boracic acid. The urine flowing freely from catheter.

On December 12th the wound had all united, except at the upper part, which was discharging somewhat offensively.

On December 13th, urine became somewhat darker, and more blood-stained.

On December 14th, iodoform poultices applied to wound, which is discharging a very offensive dark pus.

On December 16th, catheter was removed from the bladder, but was replaced on the 17th, as the urine began to come through the external wound.

On December 21st the urine became very blood-stained.

On January 3rd, hæmaturia still continuing, and blood-stained urine coming from the external wound, Dr. O'Hara had the bladder syringed out with boracic acid, and equal parts of iodoform and boracic acid in powder to be applied to the wound.

On January 5th, passing urine much more freely, and the wound is closing rapidly. The bladder will hold 32 ounces of boracic lotion without pain. The temperature is still slightly elevated at night, to 99° or 100°.

On January 19th, urine quite clear. The external wound has closed. Has been up last three days.

On January 31st patient was discharged cured.

This case is interesting as being the first case of supra-pubic operation for stone reported from any of the Melbourne Hospitals.

Note by Dr. O'Hara.—There are some advantages which can be claimed for this method of operating :—1st. The operation is a cleanly one. 2nd. All the cut parts are exposed to the surgeon's view, and torsion can be used. 3rd. Antiseptic measures can be used. 4th. The patient can lie in a clean dry bed, instead of soaking in his own urine.

Febris Enterica—Perityphlitis.—Recovery.

Under the care of Dr. Adam.

Reported by A. S. Joske, M.B. Ch. B.

A.C., aged 26, was admitted into the Alfred Hospital on December 25th, 1886. He had been suffering from the usual symptoms of typhoid fever for the last fourteen days. The fever ran a moderate course, the temperature at the highest being 104·6°, gradually falling to normal on the 28th day of illness. The temperature remained normal only for three days, then it gradually ranged between 100° at night and 98·4° in the morning, up till January 24th, 1887.

He had a good deal of abdominal distension and constipation for the first ten days of his illness, but his other symptoms were not unusual.

On January 18th he first complained of a feeling of fulness in his abdomen after taking food. On January 24th a hardening and thickening, with dulness and pain on percussion, could be felt in the neighbourhood of the ileo-cæcal valve, and along the course of the ascending colon. His temperature now rose to 103° by night, until the 30th of January, when, after passing about 2 oz. of pus by the bowel, it become normal night and morning. The pain and hardness gradually disappeared, and he was discharged on the 15th February cured, his temperature never having risen above normal from the time the pus was discharged by bowel.

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LADY DOCTORS.

The question of the admission of women to the study of medicine at the Melbourne University has attained to a kind of provisional settlement. Six ladies have been allowed to enter their names and pay their fees, and have begun the work of the first year. To a certain extent, therefore, the University Council is bound to make provision for them in the remaining years of the course, and to admit them to degrees if examinations are passed. We do not know that the Council could with any good grace have done anything else, and the Sydney and Adelaide Universities have acted in a similar way. Of course the real difficulties hardly arise in connection with the work of the first year, which embraces only the subjects of chemistry, biology and natural philosophy, classes now open to female students preparing for science or arts degrees. Trouble will arise in the second year, since the study of anatomy has then to be entered on; and with the third year's course the difficulties will be further increased, as surgery has then to be taken. For the present no decision has been arrived at as to the necessity for providing separate instruction in any of the subjects which come on in the later years of the course, and perhaps there is wisdom in deferring a decision for a short time, until it is seen how the experiment works, and until there is some distinct expression of feeling on the part of the lady students themselves. So far, it may be judged that they are prepared to accept whatever is provided for them, and it is settled that the instruction given and examinations passed are to be similar to those required from male students. Whether the system adopted be that of separate or combined instruction there will be difficulties experienced; but popular opinion, which on such a matter must have weight, will, we think, be in favour of separate instruction in some subjects, and there have been indications that this meets with favour also among the members of the University Council. The expense will of course be considerable, and it will not be very easy to get a full double system of clinical instruction with pathological work. Certainly with even six female students there will be more reason in incurring the necessary expenses than in Adelaide, where only one lady has so far expressed a wish to enter on the study of medicine. It will be desirable, however, that the Council should not too long defer coming to some decision about the providing of instruction in special subjects in the second and later years. If women are to study anatomy, surgery and obstetrics along with men, they should know it beforehand, that they may make arrangements accordingly.

University Intelligence.

MELBOURNE UNIVERSITY.

At the meeting of the Council on the 4th inst., Mr. McFarland, in place of Dr. James Robertson, moved that Dr. Brownless be elected Chancellor. He said that Dr. Brownless had for 29 years held the office of Vice-Chancellor, and during that period had repeatedly served as acting Chancellor, altogether for more than six years. Mr. Ellery moved the election of Professor Irving, but on a vote being taken, Dr. Brownless was elected by six votes against five.

The Chancellor moved "That two of the physicians attending the in-patients at the Melbourne Hospital be appointed clinical lecturers on medicine, and that two of the surgeons attending the in-patients at the Melbourne Hospital be appointed clinical lecturers on surgery until the end of the July term."

The Faculty of Medicine reported as follows:—"The University receipts from medical students for hospital attendance and instruction during the present year amount approximately to £964.

"Parliament votes £500 annually for clinical teaching, which suffices to pay one lecturer on clinical medicine and one lecturer on clinical surgery. The total sum now available for clinical teaching is therefore £1464.

"It is expedient to give all members of the staff of the Melbourne Hospital a direct interest in the training of the students. Hence it may be suggested that, excepting those members of the staff who hold special clinical appointments, every physician or surgeon to in-patients should be paid £75 per annum, and every physician or surgeon to out-patients, £25 per annum. A slight modification of the rules of the Hospital would be necessary for the establishment of this system.

"The following special appointments should be made:—From among the in-patient staff—two lecturers on clinical medicine, two lecturers on clinical surgery; the clinical lecturers to have the same rank and the same remuneration (£250 per annum) as other lecturers in the Medical School. From among the out-patient staff—a medical clinical tutor, a surgical clinical tutor; the clinical tutors to be paid £100 per annum, and to rank as demonstrators; a demonstrator of morbid anatomy.

"Unless such clinical tutors are appointed, the practical training of second and third year students will be unsystematic and ineffective.

"The total expenditure under this scheme would be £1650. There would thus be a balance of expenditure over income of £186, which it would be necessary to provide from some other source."

After a short discussion, an amendment was carried, inserting the words "It is desirable" before the Chancellor's motion. The matter is therefore left practically where it was, and students are still in uncertainty whether or not they are to receive the special clinical instruction, for which they pay, and to provide which the Government gives a special grant.

Professor Spencer, the professor of biology, who has just arrived from England, was introduced to the Council, and welcomed to the University.

At a meeting of the Senate on the 22nd ult., the report of the Special Committee on the affiliation of the Ballarat School of

Mines was unanimously adopted, with a slight alteration. It is provided :

1. That before the statute of affiliation comes into operation, the School of Mines should produce evidence to the satisfaction of the Chancellor, that the School possesses property to the value of £10,000.

2. That all appointments of the teaching staff of the School in any subject which forms part of any course for any degree in the University, should be subject to the approval of the Council of the University.

3. That the statute of affiliation should not take effect until the statutes of the School of Mines have provided for the nomination of one-fifth of the School Council, on the appointment or recommendation of the University Council.

4. That the Reports of the School of each year's work, in all subjects which form any part of any course for any degree in the University, including in such reports any examination papers set by the School in any such subjects, should be annually laid before the Council of the University.

5. That the connection between the University and the School should be terminable at any time by mutual consent, or after twelve months' clear notice, at the will of either body.

6. That the School should, during the existence of the affiliation of the School with the University, be called "The School of Mines, Ballarat, in the University of Melbourne."

The twenty-fifth anniversary of the opening of the Medical School, was celebrated by the delivery of an introductory lecture, by Dr. Neild, in the Wilson Hall, on the 22nd ult. The Acting Chancellor, Dr. Brownless, occupied the chair, and there was a good attendance, not only of teachers and students, but of the general public. The lecture was chiefly taken up with a sketch of the history of the School, and was attentively listened to. [We hope to be able to print it in full in our next number.]

Dr. Masson, the new Professor of Chemistry, delivered his inaugural lecture in the same place on the 24th ult., and there was again a large attendance. The subject of the lecture was, "The Scope and Aims of Chemical Science." It was very fully reported in the morning papers, but the hope was expressed that it will be issued in a separate form, and obtain a large circulation. The teaching of Chemistry will now be one of the most important subjects taught in the University.

The following are the pass lists in medicine at the ordinary examinations in the February term :—

FIRST YEAR.

Thomas Hugh Boyd, George Constable Hayes, Caleb Joyce, Hugh Lathrop Murray, William Francis Orr, William Henry Rigby.

SECOND YEAR.

James Abernethy, Ernest Auchterlonie Anderson, John Edward Barrett, Walter Hansford Bracewell, James Cook, George William Damman, Denis Doolan, Joseph Milton D'Amer Drew, Clarence Godfrey, Emil Guthiel, Ramsay Mailer, Arthur John Nyulasy, Frank Montgomerie Peebles, George Owen Rigby, Arthur Edward Syme.

THIRD YEAR.

Arthur Gideon Hugh Colquhoun, Edward Leslie Gault, Alexander Mackie, Richard Augustus Aloysius Manley, James Ferdinand Rudall.

FOURTH YEAR.

G. L. Bell, J. Cookson, C. H. Hill, F. D. Jermyn, J. P. Kelly, J. F. Merrillees, J. J. Miller, W. A. J. Moss, J. S. Thwaites, J. K. Troup.

FIFTH YEAR.

Hugh Alexander Deravin, Thomas Hodgson, Martin Magill, Charles Donald Russell.

SINGLE SUBJECTS.

Structural and Physiological Botany.—William Ostermeyer.

Physiological Chemistry and Histology.—Alfred Watson Crooks, Herbert Roger Horne, Allan Godwin Jackson.

Medical Chemistry.—Edgar Holcroft, William Robert Mathews.

Practical Chemistry.—William Stewart Corr, Alfred Watson Crooks, Charles Carty Salmon.

Junior Descriptive and Surgical Anatomy.—William Stewart Corr, Thomas Davies, Edgar Holcroft, George James Napthine.

Physiology.—Robert George Reid.

ADELAIDE UNIVERSITY.

At the meeting of the University Council on the 25th ult., a report from the Faculty of Medicine was adopted, recommending that women be admitted to the study of medicine on the same conditions as male students.

Another report from the Faculty was also adopted, to the effect that the Rev. W. W. Mantell, of Victoria, should be admitted to examination for the degree of M.B., on attending all the lectures required by the University of Melbourne for that degree, though he had attended no lectures at Adelaide, and irrespective of the differences that may exist between them.

It was announced that Sir Samuel Davenport had been elected a member of the Council, in place of Dr. Gardner resigned.

At a meeting of the Senate on the 23rd ult., the following motion by Dr. Poulton was almost unanimously carried:—"That the Senate is of opinion that provision should be made in the election of members of the Council, for recording the votes of members of the Senate who do not reside in Adelaide or its suburbs, so that members living at a distance, or temporarily absent from the city, may be enabled to participate in the control of the University."

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee on the 22nd ult., Dr. J. Fulton wrote informing the Committee that he intended visiting Europe, and he asked for leave of absence. He applied for leave till his time of office expired in August next, and as he intended to seek re-election then, he desired the Committee to extend the leave till January 1888, assuming him to be re-elected. It was agreed to grant the leave of absence till August, and that Dr. Fulton be informed that the Committee had not the power to grant the further leave until he should be re-elected.

Dr. J. de Burgh Griffiths, one of the physicians attending out-patients, was granted an additional two-months' leave of absence.

The Medical Superintendent reported that during the fortnight no cases of pyæmia had occurred in the institution, and that four cases of erysipelas had been admitted from outside.

In regard to Dr. T. P. Lucas's suggestion as to the treatment of fever cases, the Medical Superintendent stated that no tent was available for his experiments, and that serious complications would result from an outside medical practitioner being allowed to interfere, either directly or indirectly, with the treatment of patients as directed by the indoor physicians.

At the meeting on the 5th inst., a letter was received from the Medical Students' Society, asking the Committee to re-consider its decision to do away with the £50 salary hitherto paid to the resident medical officers. Professor Allen, as Dean of the Faculty of Medicine, wrote supporting the letter of the students, and pointing out that if the salary were done away with it would have the effect of preventing some of the most deserving graduates from coming into the hospital. Mr. Plunkett gave the necessary month's notice that he would move that the resolution to discontinue the payment of £50 per annum to resident medical officers be rescinded.

The medical staff reported that they had considered the letter of Dr. Barrett, suggesting that an honorary oculist to the institution be appointed, and whilst they agreed that such an appointment would be advantageous, still they could not advise it in view of the present crowded state of the institution. A second letter was received from Dr. Barrett, offering himself for appointment as honorary oculist to the out-patients. Dr. Lewellyn, the Medical Superintendent, was called in, and said that it would be impracticable to have an honorary oculist to attend out-door patients, without having bed accommodation for ocular cases.

The Building Committee reported that the University Council had made new regulations, whereby the students in their second year should attend the out-patients' department of the hospital. As these numbered over 80, great inconvenience would be caused through over-crowding, more especially in the casualty and consulting rooms. It was suggested that the General Committee should consider the better provision of accommodation for students.

In the absence of funds, and in default of the selection of a better site for a new hospital, the Committee pointed out that a series of pavilions might be erected parallel with the front of the present buildings and within the hospital grounds, which could be made to accommodate 304 beds, irrespective of the accommodation above the dispensary and that provided for the isolation of patients. These buildings could be made available in sections as completed, and the portions of the present building corresponding thereto could be demolished.

The report was laid on the table.

ALFRED HOSPITAL.

At the meeting of the Managers on the 25th ult., Mr. J. T. Rudall, F.R.C.S., was elected Honorary Surgeon in the place of the late Dr. Blair; and at a meeting of the Medical Staff on the 30th ult, Dr. Embling was elected Chairman, also in succession to Dr. Blair.

There is still some difficulty in connection with the adoption of the New Rules for the guidance of the Honorary Medical Staff, but there is reason to suppose that, as the result of a conference with a Committee of the Managers, the objections will be removed.

The new course of lectures to nurses and lady visitors will be conducted by Drs. Schlesinger and Barclay Thomson on alternate Thursday afternoons, and examinations for certificates will be held in July and December.

WOMEN'S HOSPITAL.

It has been decided to admit the press to the meetings of the Committee, and reports now regularly appear in the daily papers. At the meeting on the 25th ult., a letter was received from Dr. Balls-Headley, thanking the Committee for giving him leave of absence, and asking that it might begin on the 7th inst. As there was some doubt expressed about the steps to be taken for appointing a *locum tenens*, it was resolved to ask for a written opinion from the Solicitor of the Hospital.

Vital Statistics.

The report of the Government Statist on the Vital Statistics of Melbourne and Suburbs, for February 1887, shows that the births of 1041 children, viz., 541 boys and 500 girls, were registered during the month.

The deaths registered numbered 822, viz., 434 of males, and 388 of females.

To every 1000 of the population of the district, the proportion of births was 2·80, and of deaths 2·21.

One hundred and twenty one deaths occurred in public institutions.

The number of children under one year who died was 305, the total number under five years being 427.

As compared with the experience of the previous month, under the head of specific febrile or zymotic diseases, deaths from measles fell from three to *nil*, and those from diarrhœal diseases, from 149 to 113. To counterbalance this decrease, the mortality from typhoid fever was the highest ever yet recorded in any one month, the deaths rising from 40 to 70. In 1886, there were 294 such deaths, and in the present year, 110 deaths have already taken place. Under the head of constitutional diseases, deaths from cancer fell from 25 to 12, and those from phthisis from 82 to 62. Fourteen deaths occurred among child-bearing women during the month, as against 8 in January. If these numbers are compared with the births registered in the same periods, it follows that 1 death of a mother took place to every 74 children born alive, as against 1 to every 151 such children in the previous month.

In his summary of the Vital Statistics of Melbourne for the year 1886, Mr. Hayter presents the following interesting comparison of the figures, for the same period, for all the Australasian capitals. He considers those for Adelaide unreliable, probably, because the estimated population has been given for a larger area than that to which the births and deaths relate. In each case, the suburbs are included.

Capital Cities.	Estimated Population.	Births.		Deaths.	
		Total Number.	Number per 1,000 of the Population.	Total Number.	Number per 1,000 of the Population.
Melbourne ..	371,630	12,941	34·82	7,590	20·42
Sydney ..	307,541	13,132	42·70	6,282	20·43
Brisbane ..	51,683	2,250	43·53	1,018	19·70
Adelaide ..	128,377	3,826	29·82	1,837	14·31
Hobart ..	30,805	1,107	35·94	719	23·34
Wellington ..	27,833	1,050	37·73	487	17·50

Local Subjects.

Medical Board of Victoria.—The following gentlemen have registered their qualifications:—John Bellett Walter, Avoca, M.D. Dubl. 1886; Arthur Henry Gordon, Cheltenham, M.R.C.S. Eng. 1883, L. et L. Mid. R.C.P. Edin. 1883; Joseph Ross, Melbourne, Staats Examen 1881, M.D. Wurzburg 1882; John Macnaught, Winchelsea, L. et L. Mid. R.C.P. et R.C.S. Edin. 1877; Edward Johnson Williams, Prahran, L.R.C.P. et R.C.S. Edin. 1886. L. Mid. K.Q.C.P. Irel. 1886; William Ainslie Goodall, Galt, Ontario, Canada, L.K.Q.C.P. Irel. 1885, M.D. et Ch. M. Victoria, Canada, 1885, L.C.P.S. Ontario 1885; Charles de Wolfe Heard, Melbourne, L.R.C.P. et R.C.S. Edin. 1881; Richard Herbert Joseph Fetherston, Prahran, L.R.C.S. Irel. 1884, L. et L. Mid. K.Q.C.P. Irel. 1885, M.B. et Ch. M. Edin. 1886; George James Scantlebury, Ballarat, L. et L. Mid. R.C.P. et R.C.S. Edin. 1886, L.F.P.S. Glas. 1886. Additional qualification registered:—No. 1235, James Anderson, Footscray, L. Mid. R.C.P. Edin., &c., 1885.

Names of deceased medical practitioners ordered to be erased from the register:—No. 460, Edward John Wilson, M.R.C.S. Eng.; No. 158, John Blair, M.D.

Public Vaccinators.—The following appointments have been made:—Thoona—Thomas S. Davies, L.R.C.S.; Lillimur North and Kaniva—William

Cumming, M.D., *vice* A. Steven, M.D., resigned; North Fitzroy—George Horne, M.B., *vice* Frederick Daniel, L.F.P.S., resigned; Charlton—Thomas George Beckett, L.R.C.S., *vice* James Smeal, L.F.P.S. resigned; Oakleigh—Donald Simpson, M.B., *vice* W. E. Stock, resigned.

Health Officers.—The following appointments have been confirmed:—Borough of Northcote—Edwin Jeffrey Bird, M.B., *vice* Reginald Edward Weigall, M.B. resigned. Shire of Wyndham—Hector Rath Maclean, M.B., *vice* David Purdie Maclean, L.R.C.S., resigned.

Mr. E. M. James, M.R.C.S., has been appointed a member of the Medical Board, in place of the late Dr. Blair.

A meeting of persons favourable to the formation of a Charity Organisation Society was held at the Town Hall, Melbourne, on the 6th inst. Information as to the successful operation of such Societies in Adelaide and in England was supplied, and an influential Committee appointed to formulate a scheme, to be submitted to another meeting in the same place about a fortnight after. There can be no doubt that there is ample field for the operations of such a Society in Melbourne, where charity is now greatly abused.

The question of boarding-out lunatic patients is again under discussion. All the asylums are full or overcrowded, and Dr. Dick has recommended that large additions should be made to the buildings. The acting Chief Secretary, Mr. Pearson, however, is unwilling to sanction the large expenditure which would be needed, and is of opinion that there would not be great difficulty in finding persons willing to receive suitable cases at a reasonable remuneration.

The long continued discussions about the improvement of the Sandridge Lagoon have not yet led to any final settlement. At present no scheme can be carried out on account of the refusal of the South Melbourne corporation to bear its share of the expense, though the Government is prepared to bear one-third of the cost of the necessary works. Probably the Supreme Court will be appealed to, for the purpose of preventing the South Melbourne corporation from turning sewage into the lagoon.

BIRTHS.

Bennett.—On the 21st ult., at Hewlett House, Hamilton, the wife of Arthur Bennett, M.D., of a son.

Penfold.—On the 17th ult., at View Place, Sandhurst, Mrs. Oliver Penfold, of a daughter.

Williamson.—On the 25th ult., at De Cameron, Wimmera East, the wife of Walter Williamson, M.D., of a son.

MARRIAGES.

Adam—Young.—On the 24th ult., at the Presbyterian Church, Inglewood, by the father of the bridegroom, Alexander Adam, M.B. Ch. M., to Agnes Maud, youngest daughter of the late George Young, of Melbourne.

Bartlam—Youl.—On the 2nd inst., at St. Paul's, by the Rev. Dr. Bromby, W. B. Bartlam, of Marathon, Queensland, to Rosa Phelps, second daughter of R. Youl, M.D.

DEATH.

Smith.—On the 9th ult., at Duninch Asylum, near Brisbane, Agnes, wife of Patrick Smith, M.D., medical superintendent, aged 50.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in Pamphlet form by communicating with the Publishers before the issue of the *Journal.*

THE
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THE MEDICAL SCHOOL OF THE MELBOURNE UNIVERSITY.*

By JAMES EDWARD NEILD, M.D.
Lecturer on Forensic Medicine.

MR. VICE-CHANCELLOR, LADIES AND GENTLEMEN,—

The Medical School of the University is now entering upon the twenty-sixth year of its existence, and the Faculty of Medicine have thought it well, that the occasion of beginning the session for this year should be marked by the delivery of an Address, and they have done me the honour to request me to undertake that duty. While conscious of the distinction thus accorded me, it would be only affectation if I did not believe that the Faculty, in making the request to me, knew that from my long connexion with the School, I possessed a good deal of personal knowledge, both of the University generally, and of the School as the most important section of it; and that, therefore, I was not ill qualified to note and briefly comment upon the progress which has so happily marked its career.

Looking back upon the long procession of events that have happened since the project of a Medical School took definite shape, I cannot but regard with a perplexed interest, but nevertheless, with a large measure of satisfaction, many of the occurrences which have served to indicate its movement. As a long chapter in the social and educational history of this new country, the past quarter of a century just closed is curiously engrossing.

The scheme of the University itself, as everybody knows, owed its inception to the late Sir Redmond Barry, who, with eyes far-seeing beyond those of his contemporaries, perceived, even in the early era of this country, the desirability of an educational institution to which all others should look up as their head, and their authority; and although he was counselled to dismiss from his mind such a project as premature, if not visionary, he persisted in regarding it as not only possible, but imperative, and he lived long enough to see much of the fruition of his hopes, and a great deal more than even he, with all his sanguine belief in the truth of his predictions, ever dreamed would come to pass.

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* Address on the Twenty-fifth Anniversary of the Opening of the Medical School. Delivered in the Wilson Hall, on March 23rd, 1887.

The Act of Incorporation of the University of Melbourne became law on the 22nd of January, 1853, and the Council were appointed almost immediately after. On the 3rd of July, 1854, the first stone of the original University buildings, now, unhappily, in premature ruin, was laid by the just arrived Governor, Sir Charles Hotham. On the 13th of April, 1855, the University was formally opened by the Chancellor, Mr. Justice Barry, there being present sixteen students and four professors, and the place was the old Exhibition Building, now, and for some time, a thing of the past, the site being occupied by the Mint. For several months after the opening, the lectures were delivered in the Exhibition Building.

Although the Act of Incorporation provided for the granting of medical degrees, there was no mention made of medical teaching, and, in fact, although a Medical School was sometimes spoken of, it was generally regarded as something altogether anticipatory, and not, for many years, to be seriously thought of. But in that same year, viz. 1855, Dr. Brownless was appointed a member of the Council, and, from the day of his first attendance at its meetings, he resolved there should be a Medical School, and he never wavered in his determination to carry out this project. He, therefore, is the actual founder of the School. As a matter of course, he was met with great opposition, and there were not wanting those who ungraciously explained his enthusiasm, by attributing to him unworthy motives. But he was not a man to be deterred from a good purpose, either by argument or abuse; and so he went steadily on, maturing his scheme, which, in 1857, he presented formally to the Council; but it was five years later before it grew into a veritable embodiment. In the mean time, two gentlemen, who were entirely with Dr. Brownless in the belief that a Medical School was an integral part of the University, had made an informal beginning. These were Dr. Eades and Dr. Macadam, who lectured in the laboratory of the latter, behind the Public Library, severally on Materia Medica and Chemistry. On the 10th of December, 1861, Dr. Brownless, who in 1858 had been elected Vice-Chancellor, an office he has ever since most worthily filled,* succeeded in inducing the Council to pass the regulations for the School, and somewhat later he obtained from the Government permission to erect the Medical School buildings where now they stand. I believe his own wish was to make them part of the original structure of the University, but several of the Council were shocked at the proposal to allow a dissecting-room to come betwixt the wind and their corporate nobility, so that it was put as far off as possible ; and still further to mark the objection of the Council to a Medical School at all, it was built in as economic a manner as might be, the materials being brick and stucco, instead of smoothed freestone like the main building. The building, however, was not ready for use until about April 1864.

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* Since this address was delivered, Dr. Brownless has been chosen Chancellor, an honour he has thoroughly earned.

In January 1862, Dr. Macadam was appointed Lecturer on Chemistry. On March 3rd, the School was informally opened; in September of the same year Dr. Eades was chosen Lecturer on Materia Medica, and the two appointments of Dr. Macadam and Dr. Eades may be regarded as the actual beginning of the School. In the latter part of the same year, Professor Halford arrived from England, and on the 1st of May, 1863, he delivered his introductory address in the Mathematical Theatre. From that time the work of the School went steadily on, and the first class consisted of but three students, viz., Patrick Moloney, William Carey Rees, and Alexander Mackie. Of these, Mr. Mackie fell away from his allegiance to medicine, and entered the Presbyterian ministry ; yet, curious to relate, a few months ago he made his appearance in my lecture-room, and said that, after a quarter of a century's vacation, he was going on with his medical studies. And now Mr. Mackie has just passed his third year. Dr. Rees died in 1879, after giving promise of attaining a very high position; and Dr. Moloney is at this moment one of the best known and best liked members of the profession in the colony.

The School having been fairly started, the Council proceeded to appoint the rest of the Lecturers as they were required. I was the last of those so appointed, and the date of my election was the 27th of March, 1865. The list of the original teaching staff was as follows :—Professor Halford, in Anatomy, Physiology, and Pathology ; Dr. Macadam, in Chemistry and Practical Chemistry; Dr. Eades, in Materia Medica, Therapeutics, and Medical Botany; Dr. James Robertson, in the Theory and Practice of Medicine; Dr. Edward Barker, in Surgery; Dr. Richard Thomas Tracy, in Obstetric Medicine and Diseases of Women and Children ; and Dr. James Edward Neild, in Forensic Medicine.

In connection with this slight historical record of the School, I shall be pardoned, I am sure, if I speak, but all too briefly, of those of my colleagues whom I knew so well and liked so cordially, but who are gone from us for ever. I am proud to think they were my friends, and that I was associated with them in the work of building up this Medical School of ours.

Dr. Eades was one of the most genial, most kindhearted of men. As a lecturer he had already won a reputation in the old country. He had that easy conversational manner which makes listening to a speaker not an effort, but an enjoyment. A man of more varied information it would hardly be possible to find, and the subject he taught in the School, perhaps of all the subjects comprehended in our composite science the least capable of being made attractive, he dealt with so as to ensure, not only attention, but pleasurable interest. He was an accomplished conversationalist, and a talk with him was always calculated to put even a melancholy man into good humour. His social qualities were admirable. He was one of the best of after-dinner speakers, and at those convivial meetings, when we used to forget that there were ever such things as professional differences, he would sing, in a fine rich baritone voice, some of those racy Irish songs with rolling choruses, in which it was impossible for the least unmusical not to take part. It is nearly twenty years since he died, but his bright, good-humoured face and portly figure, are distinctly present to my mind's eye as I record this brief memoir of him.

Dr. Macadam was an active-minded man, and, besides his duties as Lecturer on Chemistry, City Health Officer, and Government Analyst, he undertook many other public functions. He was a clear and fluent speaker, and the public lectures, in which he presented scientific subjects in an attractive form, were attended by thronged audiences. He, however, committed the error of going into political life, and he found, too late, that politics and science do not go well together.

Dr. Barker was one of the pioneers among old colonists, and for some time after he came to this new country he quitted medicine for squatting, but, when he returned to his allegiance, he soon found himself engaged in active work. He was officially connected with the Melbourne Hospital where he won deserved credit as a sound practical surgeon, so that his appointment in the Medical School was but a fitting tribute to his capabilities. Everybody who knew him regretted that his latter days were not marked by the prosperity which he enjoyed in his earlier experiences.

Dr. Tracy was a typical illustration of a successful man. As a general practitioner, he would always have held his ground, but in his gynæcological specialty he took first rank, and he would equally have ranked first if he had chosen to win his successes in the old country. His early death from intestinal cancer in 1874, caused universal regret, both in the public and in the profession. No man ever more completely enjoyed the confidence of his patients, and no teacher ever secured more certainly the regard of his pupils.

The changes which have happened in the various professorships and lectureships, since the commencement of the School have been as follows: Professor Halford who was originally appointed to teach Descriptive and Surgical Anatomy, Physiology and Pathology now devotes himself exclusively to General Anatomy, Physiology and Histology, the subjects of Descriptive and Surgical Anatomy and Pathology being undertaken by Professor Allen, whose appointment was made in 1882. To Dr. Macadam, as Lecturer in Chemistry, succeeded Mr. Kirkland, who, in 1882 was created Professor of Chemistry, and who, dying in 1885, has been succeeded by Professor Masson, who arrived from England last year. Dr. Eades as Lecturer on Materia Medica and Therapeutics was succeeded by Dr. Sturt, who resigned after a brief occupancy of the office, and was followed by Dr. S. D. Bird, who on accepting the lectureship on Medicine made vacant by the resignation of Dr. James Robertson, was followed by Dr. Williams, and, he resigning, has been followed by Dr. D. Grant. This lectureship has undergone the further change of abscission, a new lectureship having been formed of Therapeutics and Hygiene, to which Dr. Springthorpe has been elected. In Surgery, Dr. Barker was followed by Mr. Girdlestone, who still retains the office. When Dr. Robertson resigned the lectureship in Medicine, he was succeeded by Dr. S. D. Bird, who continues to hold the appointment. Dr. Tracy's death made a vacancy in Obstetrics and Diseases of Women and Children, and he was followed by Dr. Martin, who, dying at Cannes in January 1879, was succeeded by Dr. Jamieson. My own department is the only one which has undergone no change, and only I and Professor Halford remain of those originally appointed. The latest addition to the staff is that of Professor Spencer, who has just arrived from England, to take the newly created chair of Biology.

It is meet that, in speaking of those who have died, I should say something of Dr. Martin and Professor Kirkland, who, although not on the first list of those appointed as teachers in the School, took their places as vacancies were made by the death of those already mentioned.

Dr. Martin, the second of the Lecturers on Obstetrics and Diseases of Women and Children, had earned a good place in the profession in this colony, by some years of the hardest of hard work, namely, that of a "Club Doctor." In this way, he had acquired a very large midwifery practice, and, unlike not a few who content themselves with practical knowledge only, he had kept good pace with the progress continually made in gynæcological science, so that when, on the death of Dr. Turnbull, he was elected a member of the honorary staff of the Lying-in Hospital, it was confessed that the choice had been a judicious one. Somewhat later, when Dr. Tracy went to Europe, in 1873, to seek for that restoration to health he was destined never to find, Dr. Martin was properly considered the best man temporarily to take the vacant place, and it was a thing of course, therefore, that, when Dr. Tracy died in November 1874, Dr. Martin should be confirmed in the appointment. He made an excellent teacher, for he was full of information, and had a felicitous way of communicating to others what he himself knew. His own death, on the 19th of January, 1879, at Cannes, whither he had gone in the hope of recruiting the powers which a too laborious occupation had permanently undermined, was a source of regret to the whole profession, who, very properly, regarded the event as a deplorable calamity.

Professor Kirkland's career in the University was a somewhat remarkable one. He was for some years the assistant of Dr. Macadam, and when, on the death of this latter gentleman, he was appointed his successor, he felt the disadvantage of being unpossessed of any medical qualification. It is to his infinite credit, therefore, that, while doing the arduous work of a teacher in the School, he attended the lectures and hospital practice necessary for the obtainment of degrees in medicine and surgery, and these he secured. His promotion to the distinction of professor was, therefore, both a recognition of his fitness for the office, and an acknowledgement of the perseverance with which he had added to his qualification for it. He was a thorough chemist, an unquestionably good teacher, and a genial warm-hearted man.

Looking down the long list of those who have worked in the School, it is impossible to feel other than saddened to think that so many have passed into the land of shadows and are now known only as memories. That both they and those who followed them have all been earnest in their work I am quite sure, and I quote the prosperity of the School in proof. In addition to the lecturers and professors, it has been found necessary (from time to time) to appoint, in several of the departments, skilled assistants, and at the present time these are represented by Dr. Moore and Dr. Syme, as Demonstrators in the Dissecting Room; Dr. Barrett, as assistant to Professor Halford in the Physiological Laboratory; and Mr. Kirkland, a son of the late Professor Kirkland, as Professor Masson's assistant in the Chemical Laboratory.

(To be continued.)

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, MAY 4TH, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. J. Williams, Allen, Neild, S. Dougan Bird, E. M. James, Fred. D. Bird, Courtenay, J. W. Dunbar Hooper, Iredell, J. P. Ryan, Jamieson, Doyle, Nutting, W. Moore, Brett, Alsop, R. Aitchison, F. J. Owen, Barker, Meyer, Peipers, A. G. Black, Joyce, G. A. Syme, Nickoll, A. J. Wood, J. H. Webb, and W. H. Owen.

The President, Dr. J. WILLIAMS, occupied the chair.

The minutes of the preceding meeting were read and confirmed.

A letter was read from Mr. Derbin Willder, Joint Hon. Secretary of the proposed Hospital for Consumptives, acknowledging receipt of the resolutions of the Society carried at the previous meeting, and of copy of the *Australian Medical Journal* containing the report of the discussion. Mr. Willder stated that the copy of the resolutions and of the *Journal* previously sent by the Hon. Secretary of the Society to Mr. Butters, Joint Secretary of the proposed hospital, must have mis-carried. Mr. Willder also expressed regret at the decision of the Society.

NEW MEMBERS.

The following gentlemen were unanimously elected members of the Society: Dr. William Robert Fox, L.R.C.P. et S. Ed., of North Fitzroy, proposed by Dr. J. Williams and seconded by

Dr. Neild; Dr. David Grant, M.A., M.B., C.M., Edin., of Collins Street East, proposed by Dr. J. Williams and seconded by Dr. C. S. Ryan; Dr. Robert James Loosli, M.B., B.S., Melb., of Camberwell, proposed by Dr. Neild and seconded by Professor Allen; Dr. Melrose Mailer, M.B., B.S. Melb., of North Carlton, proposed by Professor Allen and seconded by Dr. Webb; Dr. John Henry Osborne, M.R.C.S. Eng., L.S.A. Lond., of Echuca, proposed by Dr. J. P. Ryan and seconded by Dr. G. M. Graham; Dr. John Reid, M.A., M.D., Aber., of Spring Street, proposed by Dr. James Robertson and seconded by Dr. Neild.

One gentleman was nominated for election at the next monthly meeting.

The following paper was then read:

HOSPITAL CONSTRUCTION.

By Jas. P. Ryan, Chevalier of the Legion of Honour.

That hospitals, such as we understand them, were known to the nations of antiquity is extremely doubtful; though it is said that some such institutions were established by Buddhist priests in India three centuries before the Christian era. Subsequent to this period, as the practice of charity was disseminated throughout the nations by the followers of Christ, refuges for the succour of the old, the feeble, and the sick were by degrees established. Valens founded one in Cæsarea, 370 A.D., and Fabiola, a lady noted for her many virtues, one in Rome. But without doubt, the *infirmaria* attached to monastic institutions, where the sick brethren, as well as passing strangers and sojourners, received such medical aid as was available, were the fore-runners of our modern establishments. The Hôtel Dieu of Paris dates back to the ninth century, and Lanfranc, Archbishop of Canterbury, founded two hospitals in England in A.D. 1080, a special one for lepers, and one for the treatment of ordinary diseases. These, and all like institutions were, up to the time of the Reformation, in the hands of the clergy; but after the suppression of the monasteries, some of the latter, with a portion of the Church property, were especially set apart for the treatment of the sick, and were placed under lay management and control. In this manner originated some of the best known of the London hospitals; St. Thomas' in 1537, and St. Bartholomews', and Bedlam, or Bethlehem, for the reception of lunatics, in 1547. Others gradually sprang up, and in the eighteenth century a number of hospitals, still existing, were founded in London and in other large towns of Great Britain. For the most part they were built close to, though not in, the centres of population, for they were dreaded as nests of infection. They were large many-storied buildings, with little or no provision for the segregation of patients, or the isolation of those suffering from contagious diseases. They were generally overcrowded, and in some of them, *e.g.*, the old Hôtel Dieu of Paris, the unfortunate inmates were packed three, four, or even more, in a bed, and in times of pressure they occupied every available foot of space on the floors of the wards and in the corridors. I need hardly say that, when decency and cleanliness were so far disregarded, not much heed was paid to ventilation. Indeed, fresh air was looked upon, both by doctor and patient, as the most dangerous enemy, and was therefore carefully excluded. The mortality was at all times high; erysipelas, pyæmia and hospital gangrene were constantly present; and at recurring periods typhus fever and small pox raged as epidemics, and swept off their hecatombs of victims. To us it appears strange that, until towards the end of the last century, no one should have conceived the idea that such lamentable results might be due to preventable causes. Nevertheless such is the case, if we except Dr. Brocklesby, a British Military Surgeon, who published an Essay in 1758, in which he advocates the employment of wooden huts instead of ordinary buildings for the accommodation of the sick and wounded.

It was the work of M. Tenon, "Memoirs on the Hospitals of Paris," presented to the French Academy in 1788, which upset the old order of things, and laid the foundation of modern reform in hospital construction and management. A considerable portion of the Memoir is devoted to an examination of the condition of the Hôtel Dieu, which at the time accommodated 3400 patients, "four being the average minimum number of patients for each bed." He clearly showed that the high mortality which constantly prevailed was due to over-crowding, bad ventilation, impure and insufficient supply of water, absence of a proper classification of diseases, &c., and he drew up a plan of a hospital for 100 beds, in which these various defects were remedied. It was planned on the pavilion style, and it is essentially the exemplar of the modern hospital.

The Committee of the French Academy, who reported on M. Tenon's Memoir, looked upon it as "the most profound and the most complete work of its kind." But both the work and the plan were soon forgotten, and hospital reform remained in abeyance for more than half a century. However, some startling facts in connection with the crowding together of sick people were being noted. For instance, when the allied troops occupied Paris in 1814, it was observed that the sick and wounded soldiers treated in the abattoirs, one storied airy buildings, progressed more favourably than those sent to the over-crowded, but more comfortable hospitals. The mortality in the latter amounted to 25 per cent., whilst it was only 10 per cent. in the abattoirs.

Similar results were observed during the revolutionary outbreak of 1848; and during the Crimean war the soldiers sent to the large hospital at Scutari died at the rate of 40 per cent., while amongst their more fortunate comrades, who were treated in tents and wooden huts, the mortality only amounted to 3 per cent. A similar experience was obtained during the wars between Austria and Italy, and between Austria and Prussia; confirmed only too sadly by the terrible death-rate amongst the French wounded in the campaign of 1870-71.

In 1861 the Registrar-General showed returns from 106 hospitals in England, the mortality being greatest in London, next in the hospitals of large towns, and least in the small country hospitals; and in 1864 the Surgical Society of Paris devoted ten sittings to the consideration of hospitals, resulting in the following important conclusions:

"1. A hospital should be placed in an open space, upon a dry soil, with an inclined surface; a superficial area of at least 35 square yards should be allowed for each patient, and this should be increased as much as possible, and augmented progressively with the increase in the number of sick.

"2. The air of a hospital will be pure in proportion to its distance from thickly-populated places. In the centre of cities hospitals for urgent cases alone should be retained.

"3. Good hygienic conditions are easy to obtain in hospitals of 200 to 250 beds. These conditions are impossible to obtain in large towns if these figures be doubled.

"4. The constituents of atmosphere intermingle chiefly in a horizontal direction; hence the necessity of combating by increased space the effects of contacts, and of the proximity which constitutes crowding, and the influence of which is communicated from patient to patient, ward to ward, and one building to another.

"5. To strive successfully against contagious influences not only needs an increase of cubic space allowed to each patient, but in addition, and above all, demands an increase of superficial area, which is at present insufficient in all our civil hospitals. For similar reasons the multiplication of stories is contra-indicated, the super-position of which should be limited to two.

"6. It is illusory to believe that a large cubical capacity in wards can replace an absence of external space and aeration, or to suppose that an abundant artificial ventilation can supply the place of either of these conditions.

"7. Buildings completely isolated, and all having the same aspect, fully exposed to light, and the action of wind and rain, should be placed in a single or in parallel lines at intervals of from 85 to 110 yards, so as to secure effective separation, and external aeration."

The subject was further treated by such well-known experts as Lefort, Simon, Miss Nightingale, Sir James Simpson, Bristowe and Holmes, Erichsen, &c., and recently and most fully by Surgeon-General Mouat and Mr. Snell, in their work on "Hospital Construction and Management." In France, within the last few years, the long-buried hospital-plan of Tenon was unearthed by M. Tollet, a clever architect and hygienist, and on it, as a foundation, he has elaborated a system of construction and arrangement, that appears to me to be superior to anything that has gone before.

The first practical attempt at reform was carried out by the building of the Lariboisière Hospital, in Paris, in 1853. The wards were constructed as detached pavilions, but these were of three stories, and they were placed too near one another. In 1864 the new Hôtel Dieu was commenced, and, though a great improvement on the old building, it was condemned by a Committee of the Society of Physicians and Surgeons, who were appointed to report upon it. Then in England were built the Herbert Military Hospital and the Leeds Infirmary, both on the pavilion plan, but with grave defects; and St. Thomas', the most costly, but the most defective of the three.

The magnificent Hospital of Menilmontant, Paris, opened in 1878, was a decided step in advance, and, previous to the introduction of the Tollet system, was perhaps the best type of the pavilion construction.

And so by degrees a number of important alterations in construction and arrangement were being carried out. In the old palatial or block system, patients with all sorts of diseases, contagious and otherwise, were mixed together; and out-patients, servants, offices, and even the dead-house, were all crowded together under one roof. This has been all changed. In the newer hospitals the administration was placed in separate buildings, the wards occupied pavilions with windows on both sides, and with not more than two rows of beds. Ample superficial as well as cubic space was allowed for each patient; provision was made for the isolation of infectious cases, for the periodical evacuation of the wards, and for the disinfection of clothing. The out-patient department was well separated from the wards, and the dead-house was removed to the farthest part of the grounds. These were no doubt great improvements, but even these newer constructions were not free from serious drawbacks, such as the super-position of many stories, crowding too many buildings on a limited space, defective system of water-closets, &c.; and it was left for M. Tollet to cap the edifice of Hospital reform.

"The Tollet system," says Mouat, "is based on the subdivision of the sick into small and manageable numbers, lodged in single-storied buildings, distributed over a sufficient area to prevent undue pressure upon space, and yet so connected as to be facile of access and administration. The wards are built upon the plan of the Gothic arch, to avoid stagnation of air, or arrest of organic matters floating in it by angles or corners of any kind; they are intended to be easy of heating and ventilation; to have ample superficial and cubical space for each patient; to be constructed of materials capable of the most perfect cleansing, and to be as nearly as possible fire-proof; to be provided with verandahs to which the beds can be transferred in fine weather; and to have baths, water-closets, and dependencies of all kinds, so completely cut off as to be unable to impair the purity of the atmosphere of the sick-room. Provision is made for a careful classification of the sick and injured, and for the isolation of infectious diseases, so that any kind of sickness may be treated in the same enclosure, without injury to the sick themselves, or to the inhabitants in the vicinity of the hospital."

On this plan were built the hospital of St. Eloi at Montpellier, the Military Hospital of Bourges, the Bichât, and the hospital of St. Denis near Paris, as well as many others on the continent of Europe and in America; and the results of the treatment of the sick, and of operations performed in them, are reported as being most satisfactory. The Dean of the Faculty of Montpellier, who inspected the Bourges Hospital in 1880, declared that its "statistical results were admirable." A military report of the same time says:—"So far we attribute our exceptional success to hygienic conditions. The air of the sick rooms is as pure as the external atmosphere. We must add a remarkable fact, gathered from the admission registers of the Hospital, that not one of the 4000 soldiers quartered in the barracks built on the Tollet system was attacked by the prevailing disease, and that all the typhoid and contagious cases came from the other barracks."

I may here add what I omitted to mention above, that in France not only hospitals, but barracks, schools and even stables meant to contain large numbers of horses, are constructed on the Tollet system.

In order to enable those amongst you who are not acquainted with the subject to comprehend more clearly what the system is, I shall give a short but detailed description of St. Denis Hospital, because it exemplifies very fully the essential principles of construction and arrangement insisted on by Mons. Tollet.

It is situated on sloping ground, with plenty of open space about it. The buildings are arranged as follows:—On each side of the main entrance is a block, three-stories high, containing the official apartments, store-rooms, dispensary, kitchen, &c. On a line with the rear, but well separated from these blocks, on each side is a single-storied pavilion for chronic cases. It contains two wards of eight beds each, two smaller ones of two beds for incurable cases, a day room in the centre for the patients who are able to be up, and attached offices, scullery, lavatory, water-closets, &c. Running through the middle of the grounds, from one side to the other, is a line of five one-storied pavilions for the accommodation of medical and surgical cases. The out-flanking pavilions for medical cases are double, containing two wards of sixteen beds each; the others for surgical cases having only one ward each with a similar number of beds. Farther back, and in another line, are two one-storied blocks for infectious diseases, containing four rooms each, with one bed in each room, and detached water-closets, kitchen, and nurses' room. Besides, there are bathing houses, chapels, wash and engine house, &c.; and, in a corner of the grounds farthest removed from the sick wards, is the mortuary and post-mortem house. The hospital occupies an area of six acres, and has accommodation for 166 patients.

From the foregoing it will be seen that a modern hospital, such as the St. Denis, is a collection of small hospitals, not always of the same size, and completely separated from one another. As they are built on the same lines, a description of one will serve for all. I shall select as a type one of the surgical pavilions. It is oblong, of one story, and raised on arches of brick work some six feet above the ground, the space underneath being unoccupied and freely open to the air. The sides and roof are formed of bent iron ribs standing five feet apart, the intervening spaces being filled in below with bricks, and above, that in the roof portion, with tiles. At each end is an annexe, united to the main building by a ventilated lobby. The ward, which occupies the whole of the pavilion, is 65 feet long, 27 feet wide, and 22 feet high. A transverse section shows that it is built in the shape of the Gothic arch, all the angles being rounded off. It contains 16 beds, each bed having a superficial floor-space of 112 feet, a lineal wall space of about 8 feet, and a cubic measurement of 2457 feet. There are seven large casement windows, with fanlights above, in each side-wall, those on one side opening into a spacious verandah, 65 feet long and 9 feet wide. The interior is finely plastered and painted in oils; the floor is of oak, waxed and polished. The annexe at one end contains on one side of the entrance-hall a large day-room for patients, and on the other side a duty-room and nurses'-room. The other annexe has on one side of the entrance-hall a surgeon's room, with all the appliances for doing operations, &c., and on the other side a bathroom, and a room for the ward-attendant. From this annexe a covered bridge, 8 feet long, leads to two water-closets, which are thus completely separated from the main building. The soil pipes are of earthenware, and discharge into an iron receptacle underneath, the contents of which are periodically evacuated.

Heating, which is necessitated by the coldness of the Paris winter, is accomplished by two open fire-places in the centre of the ward, and by calorifers in the space beneath the floor, which discharge heated air into the ward through openings behind each bed. The ventilation is mainly through doors and windows, though there are also inlet and outlet apertures. The principal of these is a large convex opening along the centre of the roof, and a tube 2 feet in diameter which surrounds the stove-pipe.

From the absence of wood work, except the doors and flooring, it will be seen that the building is almost fire-proof; and as there are no angles or projections, the whole interior of the ward can be thoroughly cleansed, either by water or by firing. The cost of this hospital, exclusive of the ground, amounted to £241 per bed, considerably above the average of the other Tollet hospitals, such as the "Bichât," "Bourges" and "St. Eloi," which cost respectively £198, £148 and £107 per bed. But indeed this may appear moderate when compared with the Edinburgh Infirmary at £477, St. Thomas' at £777, or the new Hôtel Dieu in Paris at £1215 per bed. Certain modifications in the shape of the wards, &c. have been lately proposed, and carried into practical effect. For instance, in the new hospital at Antwerp they are circular, as they also are in the Victoria Hospital at Burnley, England, opened in October of last year. Whether the circular shape has decided advantages over the oblong without angles, or not, has yet to be decided; nor do I think it a question of any great importance, if only the principles of the Tollet system are granted.

A few competent authorities are in favour of hospitals composed of wooden huts. Undoubtedly they are preferable to the older style of buildings, but I think they are inferior in most respects to the Tollet pavilions. It is not, of course, intended that the type which I have given should be the model of any new hospital; nevertheless, it exemplifies sufficiently well the essential principles which should be kept in view in the construction and arrangement of all institutions for the housing and treatment of the sick.

From the foregoing it will be seen that a modern hospital is a collection of small one-storied buildings, spread over a large area of ground, so that each one is fully exposed to the sun, rain and prevailing winds. The administration, out-patient department, &c., occupy separate buildings. The wards have windows on both sides, with a verandah to which the patients may be removed in fine weather. The angles are all rounded off, the walls and ceiling covered with an impermeable material, and the water-closets so placed in an annexe that they have no direct communication with the ward.

I shall crave your patience for a moment longer, while we examine somewhat critically our until recently much lauded Melbourne Hospital, and see how it compares with its modern congeners. Laymen have been shown over it, and have been struck with admiration at everything they saw, and even members of the medical profession, after carefully inspecting its most hidden recesses, have satisfied themselves, if not the public, that it is a most admirable institution. But after what has been said in an earlier part of this paper, I think it will be allowed that this admirable institution, of which we should all be so proud, violates in almost every respect the essentials of modern hospital construction and arrangement.

1. It is closed in on all sides by a dense population.

2. The site upon which it is constructed is far too limited for the number of patients it is supposed to accommodate.

3. The main part of the buildings belongs to the old, the very oldest, style, and has all the faults of that style.

To mention some of these—it is of three stories, the floors communicate with one another by interne stair passages and large grated openings, thereby insuring the passage upwards and diffusion into the wards above, of the effluvium from those below. The wards open into central corridors, thus carefully providing for the dissemination through them of the foul air of the whole building. In some of the wards there are windows in only one wall, and then they are inadequate in size, and wrongly constructed; in others there are four rows of beds; and none have verandahs to which the sick may be removed in fine weather. It goes without saying that there is no adequate system of ventilation or warming, and the water-closet system could hardly be worse. Then the different buildings are so heaped up and crowded together, that anything like proper external lighting and aeration is out of the question.

Mr. Simon, in his report to the Privy Council in 1864, defines a healthy hospital as "one which does not by any fault of its own aggravate the recovery of its inmates." He says that unhealthiness may be due to (1) an "inherent fault," as of site, construction, &c., and to (2) a "fault of keeping," as dirtiness, over-crowding, &c.

It must be allowed that the unhealthiness of the Melbourne Hospital has been for the most part due to the first of these causes, though over-crowding has also something to answer for. In most other respects the "keeping" has been, and is most excellent, and reflects great credit on those who are immediately concerned in the management of the Hospital. But no amount of good "keeping" can make amends for radical defects of construction and arrangement, and in these respects the Melbourne Hospital stands condemned.

I shall not enter into the question of re-construction or removal, beyond stating my conviction, and repeating what I have always said since the matter was first mooted, that the re-building of the Hospital on modern lines, and making it adequate to the present requirements of the City is impossible, were it even desirable, and that, therefore, its removal to another and a better site is the only course that can be safely and economically followed.

Mr. E. M. **James** expressed the indebtedness of the Society to Dr. J. P. Ryan for bringing forward a subject in which the profession was so deeply interested. He was himself one of the oldest officers of the Melbourne Hospital, and knew what a dungeon it was in old time. He recognised that even now it did not comply with all the modern requirements. It was inadequate for the needs of our growing population, whether it were viewed as a general hospital or as part of the Medical School. He was perfectly at one with his brethren as to all these requirements. But exaggerated blame had been cast upon the Hospital. Great successes had been achieved both by the old and the present surgeons. He regarded the present site as invaluable, and thought it sufficiently large, having in view the facilities for ventilation afforded by modern scientific inventions. Much might be learnt from the methods adopted in large modern hotels and in mines. He was not at all opposed to a scheme of general reconstruction, and was no advocate for additions to the present structures. Buildings should be erected all round the square and the centre should be left open.

Professor **Allen** said that most members had availed themselves of past opportunities of expressing their opinions concerning hospital construction in general, and the Melbourne Hospital in particular. He urged that further discussion concerning that institution should be kept free from over-statement. The defects in its construction were fully recognised, and public attention should now be directed to the fact, vouched for by the Medical Superintendent and by the Honorary Staff, and confirmed by recurring reports in the daily papers, that the Hospital was inadequate in size to satisfy the absolute necessities of the sick poor of Melbourne.

Dr. **Jamieson** felt with Professor Allen that it was impossible to help repeating oneself in such a discussion. No satisfactory Hospital could be obtained by adding new buildings to those on the present site. The central block at least must be pulled down, being wholly unfit for either medical or surgical cases. The site was too small to allow the erection upon it of detached pavilions in sufficient number to satisfy the immediate requirements of the sick poor; it was altogether inadequate when the prospective growth of the metropolis was considered; and it was too valuable to devote to Hospital purposes when its cost would provide an efficient Hospital elsewhere. Mr. James' scheme would bring the patients too near the streets. The only good policy was complete removal.

The **President** said that all members were much of one opinion as to what a hospital should be. Concerning the Melbourne Hospital, the question was chiefly one of finance. If plenty of money were available there would be no difficulty in erecting on the present site an excellent hospital with a certain rather limited number of beds. If the inhabitants of the Northern Suburbs made perpetual objection to the foundation of a large hospital in their neighbourhood, the only plan would be to build a hospital of limited size on the present site, and let special provision be made for the requirements of the Northern Suburbs. He had already suggested a Jubilee Fund for the construction of a hospital on a larger site, so that present needs might be amply satisfied and room given for future expansion. Whenever the movement for the foundation of such an hospital came to a head, Dr. Ryan's paper would be found convenient for reference.

Dr. J. P. **Ryan**, in reply, remarked that apparently all members present were in the main of one way of thinking. He held that it was impossible on the present site to erect a hospital that would supply the needs of Melbourne for the next ten or fifteen years. All agreed that only two courses could with any propriety be followed—complete removal, or complete rebuilding; and in his own opinion the latter course would not permit the provision of a hospital sufficiently large, and would not, from a financial aspect, be the way to use the funds available to the best advantage.

Notices of Motion.

The **Hon. Secretary**, on behalf of the Committee, read the following notice of motion:—That the following new Rule be adopted by the Society :—" 7A. Any member residing more than ten miles from Melbourne, who shall present £10 to the Society in one sum, or who shall surrender debentures to the same amount in value, shall be a Country Life-member of the Society, provided that £5 or one debenture shall be accepted instead from those who have been members during five years. If a Country Life-member shall subsequently reside within ten miles of Melbourne, he shall either resume his Ordinary Membership, or on presenting an additional £15 to the Society, or on surrendering debentures to the same amount in value, shall be a Life-member of the Society."

Dr. **Neild** gave notice that at the next special meeting of the Society, he would move that the third clause of Rule 11 be rescinded, so far as the word "fourteen" is concerned, and that the word "seven" be inserted in its place.

PATHOLOGICAL EXHIBITS.

The President, Dr. J. **Williams**, exhibited a number of pathological specimens showing typhoid ulcers of the bowel in various stages of cicatrisation, notwithstanding that limited perforation had occurred; he also showed fatal secondary perforations from the same patient, induced by the improper administration of grapes by a friend, contrary to orders.

Professor **Allen** exhibited numerous pathological specimens, details of which are unavoidably postponed on account of the pressure on our space.

POSTPONED BUSINESS.

The business postponed until next meeting includes papers by Mr.' Fred. D. Bird on Sacro-iliac Disease, by Dr. J. W. D. Hooper on Some Practical Points in the Diagnosis and Treatment of Puerperal Septicæmia, and by Dr. J. W. Barrett on the Treatment of Acute Inflammation of the Middle Ear.

The half-yearly meeting of the Australian Health Society was held on the 4th inst. Papers were read by Dr. J. W. Barrett, on "The Production of Short-sight"; by Mr. G. Techow on "Exercise for Girls"; and by Mr. G. Thomson, on "The Tooth-brush." The subject of the pollution of the Yarra was casually referred to by the Chairman, Professor Elkington, but it was said that the question was too large for the Society to take up.

The first annual meeting of the Committee of the Melbourne Convalescents Aid Society for Men was held at the Town-hall, on the 9th inst. The report stated that 120 patients had been admitted, that the revenue had been £407 13s., and the expenditure £287 13s. 5d. There are now nine beds in the institution, and two more are to be added forthwith.

British Medical Association.

VICTORIAN BRANCH.

Ordinary Monthly Meeting.

Wednesday, 27th April.

(Hall of the Royal Society, 8 p.m.)

Present: The President, Dr. Willmott, in the chair, and the following members—Drs. Cutts, Springthorpe, O'Brien, Rudall, Barker, Black, Simmons, Joyce and Henry.

The election was announced of Dr. L. Kenny, M.B. et Ch. B. Melb.

The following paper was then read:

SOME POINTS OF INTEREST IN THE MANAGEMENT OF THE INSANE.

By J. A. O'Brien, M.B., Ch. M. Glas.

The block arrangement is the plan adopted in this, the adjacent colonies, and England, as the style of architecture for asylums, but exceptions to this exist, partly at Yarra Bend and Sunbury. We have frequently heard advocated, even by members of the profession, the infinitely preferable character of the cottage. But we know that there exist patients whose presence in a cottage would not be desirable, because, if noisy, violent, or even persistently wet and dirty, they would necessarily interfere with the comfort and well-being of those about them. An asylum built on the block system, detached if possible, where noisy and excited patients could be properly attended to, and surrounded by cottages, differentiated for sick, quiet, and convalescent, would, to my mind, be the best. The question of the *Convalescent Cottage* particularly is of the utmost importance. The patient whose mental faculties are slowly recovering, should be carefully isolated from the actively insane, and if a relapse occurs, it would be easy to transfer him again to the ward. The cottage should be at some distance from the general building; it should be surrounded by everything that is pleasing to the senses, and its internal arrangements should, as far as possible, resemble those of a comfortable home.

In the general wards of an asylum, *the utility of single room* accommodation, in certain cases, has of late been questioned, and I think with good reason. It has been pointed out that destructive patients, or those whose personal habits are offensive, who have hitherto been allotted single rooms, have not improved as much as was desirable. But when placed in dormitories and watched carefully during the night by a special attendant, the destructive element may be gradually overcome, and the wet and dirty patient made clean and tidy. This experiment has been tried at Kew recently, and with encouraging results.

Success in asylum treatment in a great degree depends on the amount of occupation that can be given to those under care. There are a number of patients, however, who will not engage in work of any kind, and others whom it would be practically impossible to occupy in manual labour, such as farm or garden work. For these an effort has been made to overcome idle habits; certain days are set aside for drill and walks in the asylum grounds. If this is faithfully carried out, the patient is not only improved in health, but his general tone and state are much happier. Certain cases of insanity evince a tendency to dementia, and if their dormant faculties are not kept awake, we have soon to contend against a much worse condition. Pure air and bright sunshine are a great help, and serve to improve the bodily tone, and thus give a better chance of recovery.

Our asylums are now filled to the utmost, and the question naturally arises whether they were intended for the reception of the multifarious class which they now embrace. They admit aged and helpless patients—old men and women in their dotage—patients broken down mentally and physically. Some have to be carried into the hospital, they become inmates of the sick ward, and require nursing and feeding; are placed in arm chairs in the airing courts if not confined to bed, and are unable to assist themselves in the smallest degree. Asylums are places for the treatment of mental disease, and necessary for the safe custody of those who would be dangerous to themselves or others, but should not be refuges for the poor people under consideration. The Superintendents, being unable to describe them as sane, are helpless in the matter. Other homes could be provided, where all that is necessary might easily be secured, and at a much less cost to the State, if it is found impossible for the various Benevolent Asylums to give the nursing and care requisite.

Another class of patients also are admitted to the asylums, that might with better results be located in more suitable homes. I refer to the idiots and imbeciles of harmless character. These form an immense addition to the population. In the receiving asylums, such as at Kew, Yarra Bend, Ararat and Beechworth, they are, moreover, objectionable inmates. Their presence cannot but be injurious to those who may be tending towards recovery. Many of them suffer from bodily infirmity and inability to attend to their own personal requirements. If the attendants' time is given to such cases, they cannot give continuous attention to those it may benefit.

The home at present being opened for the children is a step in the right direction, and it is a matter for hope that it will not be deemed sufficient. Trained teachers, the establishment of schools and workshops have been highly successful elsewhere, and the results obtained should be an encouraging example to us—not to be behindhand in this colony.

Another cause of overcrowding is the admission of men and women, whose sanity has been disturbed by precarious living, and the exhaustion consequent upon severe labour. These are generally advanced in years, feeble in body, as well as in mind. It is found that a regular mode of life, good diet, and the comforts to which they have long been strangers, soon restore them to a comparative condition of well being. But here the difficulty arises. Too feeble in body, or probably, too far advanced in years, to enter again the cares of everyday life, they remain in the asylum. It seems as if, having once been inmates of a lunatic asylum, other refuges were closed. It must be said, however, that the Superintendent and Committee of the Immigrants' Home have, when possible, befriended some of the class under notice.

It may not be out of place here to mention, that every year a large number of patients are admitted on medical certificates, who are subsequently certified by the Superintendent as not suitable cases for detention. I shall not refer further to this, beyond stating that "the facts indicating insanity personally observed," and "told by others," are specially inadequate, and in some cases have to be rejected altogether by the authorities. Even in some unmistakeable cases, the certificates are poor, and would not bear examination in a court of law. It is always well to bear in mind, that some day the question as to the patient's sanity, may be raised in the law courts.

Having noted, shortly, some of the causes which lead to overcrowding in the asylums, can we suggest any possible remedy? "Boarding-out" has been the hope of the day. In Scotland, this plan has been, so far as is known, a decided success. Do however the same conditions for success exist here? The average cost of patients with us amounted, in the year 1885, to 10s. 5¼d. per week, and if boarding-out were to be tried, a much larger sum would be necessary. The cost of inspection, medical attendance, and the inability to board out females, &c., are also points demanding consideration. Personally, I am in favour of the boarding-out system as advocated by the Scotch authorities, but are the comparatively well-to-do people of Victoria likely to take the question up in the same way? The analogy between boarding-out children from the Industrial Schools, and persons mentally deficient is not a correct one, but there are certain cases where boarding-out could be attempted. For the present, until the Imbecile Home is finished, idiot and imbecile children, harmless adult imbeciles, patients suffering from mental decay accompanied by severe paralysis, could all be boarded out with their own families. This could only be done on a small scale, certainly, but it would have the advantage, that, the patients being with their own families, would presumably be well cared for.

The system has been advocated, of having a small ward attached to the various Benevolent Asylums in the colony, as a suitable place for the senile harmless insane, or patients suffering from severe paralysis, with its consequent dementia. Such a plan could be more cheaply carried out than is possible in the asylums.

A point of the utmost importance to the proper care of the insane, is that of the nursing staff. For various reasons this is difficult to maintain: they are appointed in accordance with the provisions of the Public Service Act, and after being appointed they are at liberty to apply for transfer to some other department. This is not satisfactory; and it would be better to place their appointments, &c., solely in the hands of the Inspector, the Visiting Board, and the various Superintendents. The impetus which would be given, when an attendant found it was necessary for him to satisfy his superior, would ultimately prove the truth of my assertion. At the same time, I am glad to say that the Asylums possess attendants, both male and female, who perform their painful duties both satisfactorily and well.

Another point, in conclusion, and one of the most vital interest, is the small number of medical officers. In the Asylum at Kew, with its population of 994 inmates, there are practically only two medical men; a third has been appointed, but as he is not resident, his services can only be available at uncertain periods. In America, the proportion of medical officers is much larger, more so than in England, but here we are behind both. It is not desirable to regard every patient sent to an asylum as incurable, and the question of treatment, as secondary to that of safe custody. Interest in medical work, the watching carefully of the various phases of the disease, opportunity of working out the pathology of certain conditions, and the consequent gain to science, can only be small under such circumstances. In the same way, the study of mental disease should form part of the curriculum of the University, and the student should be trained to recognise its various phases in the curable stages. There are great facilities at hand, and it is a pity they are not taken advantage of more fully. Interest in medical work would thus be kept up on all sides, and it is then possible that much more would be done in the treatment of the insane, than is at present accomplished.

Dr. **Springthorpe**, as a former officer of the Lunacy department, agreed with Dr. O'Brien in most of his remarks. The boarding-out system would be found too costly, even if the Scotch safeguard were found to be present. The over-crowding of asylums certainly prevented good scientific results. Want of classification was another great drawback. Every advantage should be given to curable cases, in surroundings and attendance; whilst incurable cases, in many instances, needed nothing beyond the block system; even here, he was pleased to see that there had been advance in the quantity and quality of amusements, drill, &c. He hoped Government reform would not be much longer delayed.

Dr. **Henry** reminded the Branch that it was mainly through its action that an inquiry into the working of the Asylums was undertaken. It was time something came of the Commission. Certainly the Asylums were over-crowded, and there were too few medical men.

Dr. **Joyce** raised the question, what should be done with cases of delirium tremens? In South Australia there was a Retreat. Surely the Asylums were not the proper place for them; and yet certificates were often given to that effect.

Dr. **Cutts** suggested the Hospitals or a Reception House. Our Retreat was only available to those who could pay £3 3s. per week.

The **President** remarked that the London Hospitals took in such patients.

Dr. **Black** gave his experience as acting officer to the Gaol. He took the ground that a man with delirium tremens had committed a crime. If there were no room in a general Hospital, or no funds for the special case at his own home, he advised that the medical man wash his hands of the case, and advise that the police be called in. The watch-house keeper, if he saw fit, could commit him to the Gaol Hospital, which was regarded as never full. There he might be remanded for further inquiry or medical treatment for seven days, and then appear before the magistrates. There were generally five or six lunatics and seven or eight cases of delirium tremens under care. Certainly certificates of lunacy should not be signed for delirium tremens.

Dr. **O'Brien**, in reply, thanked the members for their kindly hearing. A Reception House would suit both incipient lunacy and delirium tremens. As to boarding-out harmless cases, a great difficulty might arise from the fact that friends who now took out patients on leave, without payment, would probably want payment if other cases were paid. He instanced cases of great carelessness or ignorance in the signing of certificates.

The following paper was then read:

A PECULIAR CONDITION OF THE TONGUE, RESEMBLING BEEF STEAK.

By Louis Henry, M.D.

During the last few months I had an opportunity of seeing three patients whose tongues showed such a marked likeness to each other of a character which in my experience was new. The tongues were of a deep red colour, fissured in every direction, and bearing the most striking resemblance to a piece of raw beef steak. The surface of the organ seemed to be completely denuded of epithelium and papillæ, and there was no signs of any fur or coating. In each case the condition was a chronic one, and no date could be given of the first period of what I saw. The symptoms which brought the patients, who were all of the opposite sex, to see me were very similar. They one and all were brunettes, and suffered from dyspepsia in an aggravated form. The youngest was a girl in service, about 17 years of age, of delicate type, thin transparent skin, with no particular family history. A simple alkaline stomachic, with a dietary regimen, relieved the gastric symptoms, without in any way affecting the excoriated appearance of the tongue.

The second patient was a married lady of about 23 years of age, the mother of one child. In this case a very severe course of treatment had previously been carried out by a colleague in a neighbouring Colony. This lady complained, in addition to her dyspeptic symptoms, of pains in the tongue when taking either condiments or food of a high temperature. The treatment she had hitherto submitted to consisted in the taking of rather large doses of hydrarg. and pot. iodide, and painting the tongue with the solid nitrate of silver. She asserted to have experienced great relief from this treatment, combined as it was with a milk dietary, but on consulting me I could not persuade myself to continue with such heroic measures, more particularly as I was not able to discover any family history justifying me to do so. I confined my own treatment to a dietary and tonic one, introducing a little arsenic tentatively. Occasionally I brushed a little of weak solution of carbolic acid on the tongue. But with the exception of occasional alleviations of her distressing condition, I was not able to do more. I have since ascertained, through the kindness of Dr. Willmott, who afterwards attended the case, that the patient is under treatment for a divided, enlarged, indurated and ulcerated portio vaginalis. A condition which in itself would tend to lower a system very severely.

My third case is that of a lady engaged in the theatrical profession, of somewhat full habit, and of active temperament, married, but without children, and 32 years of age. The symptoms are those of dyspepsia, great nerve prostration, and physical exhaustion. Treatment has only resulted in relieving symptoms.

Shortly after the period of my conducting these three cases I was consulted by a young lady, of 16 years of age, for a condition of general weakness and malaise, and discovered, on examining her tongue, the conditions of beef steak appearance already described. In her case, as in the others, the mucosa was of a deep pinkish red, well-marked, with shallow fissures and clefts, while the characteristic papillæ seemed to have completely disappeared. The tongue was irritable and highly sensitive to food, spiced or hot. On visiting the family a few days later, I had the opportunity of inspecting the tongues of the mother and brothers and sisters, and to my surprise, I found that they all possessed exactly the same type of tongue. The members of the family are gracile and slight of build; they are of delicate constitution, without being either weak or sick, and are total abstainers. There is not the slightest suspicion of any specific history, or any previous illness that could account for this peculiarity of tongue.

I believe that anomalies of the surface of the tongue are familiar to most of us; furrows, wrinkles, fissures, clefts and depressions, one kind, or more rarely all, affect nearly every tongue, and have not any signification of disease, and are, as a rule, unnoticed by their owners, and call for no attempt at treatment. It is only when associated with symptoms of loss of health, or in relation to a history of earlier disease, that they become important from a diagnostic point of view, and compel attention.

In Butlin's "Disease of the Tongue" a case is described of a male patient who had submitted to amputation of the thigh. He recovered very slowly, and was seized with an attack of superficial inflammation of the tongue, which produced a large number of interlacing furrows, all of them very superficial, and many of them excoriated, and very sore at the bottom. The surface of the tongue between them was smooth, redder than natural, and free from papillæ and fur. The appearance of the whole was not unlike that presented by an old door, which, through age and exposure to the sun, has cracked and dried, so that its former smooth surface is broken up and mapped out by vast numbers of intersecting lines and furrows. "I," he continues, "as well as others, thought at first that the disease was due to past syphilis, but there was no history of syphilis, and there were no other symptoms to denote that the patient had ever suffered from syphilis. Further examination led me to believe it to be an example of the more acute variety of superficial glossitis described by Demarquay and Wunderlich."

The intention of the present day is to regard the changes on the surface of the tongue as a most important factor in the diagnosis of disease, and a thick coating on the tongue, depending on a swelling of the ciliated filiform papillæ, is regarded as indicative of serious trouble somewhere in the alimentary tractus. I am of opinion that such appearances have had a tendency to be very much overrated, and are in very many cases quite compatible with a healthy organism. Like weeds in a smooth green, they require mowing. On the other hand, I acknowledge the debt we owe to the tongue for the appearances it undoubtedly presents in certain diseases; in assisting, not so much at a dignosis (except in syphilis), but in helping the physician at one glance in deciding as to the *status præsens* of the illness. Whether the condition I have attempted to describe is a disease of the epithelium, chronic in its character, I am not prepared to decide. But in all my cases there has been associated with it a good deal of nervous irritation, very great debility of the system, and great prostration. And while my experience so far has been, that these cases are not easily amenable to treatment, still, by paying attention to the general health and correcting irregularities of the blood, gastric affections and diseases of the female genital organs, I believe a good deal may be attained towards curing a terribly rebellious condition.

The President had seen one of Dr. Henry's cases. He had seen such cases before, but never with such pain. The tongue resembled a glossitis, caused by an insect bite; it was not syphilitic. A uterine operation had cured the neuralgia and greatly improved the health.

Dr. Cutts recorded a similar case. Its leading character was a highly raw denuded state of the mucous membrane, with fissures like convolutions. If a stranger had seen it, he would have considered there was something dreadfully wrong; but there was no digestive, or other trouble. He believed such tongues were a not uncommon natural peculiarity, and agreed with Dr. Henry, that the tongue was often a local, rather than a systemic index.

Dr. Henry, in reply, thought that the pain in his second case might have come from the denudation of the mucous membrane.

Exhibits.

Dr. Springthorpe then exhibited the following pathological specimens:

(*a*) Fœtus and umbilical vesicle; about the end of the second month. (*b*) Fœtus and membranes, removed entire by Dr. Joske; between the third and fourth month. (*c*) Typhoid ulcers and membrane, very unusually marked with hæmorrhage. (*d*) Partial union of bowel, after removal of gangrenous portion, in a case of strangulated hernia. (*e*) Tape and round worms.

Messrs. Mayer, Meltzer and Jackson exhibited an excellent assortment of instruments.

The meeting then adjourned.

Drs. J. P. Montgomery and Lyster A. Nolan have been appointed Surgeons to the Victorian Mounted Rifles, and Dr. Thomas C. Hope, Surgeon on probation to the Victorian Militia; all with the relative rank of Captain.

Surgeon-Major Charles S. Ryan has been appointed acting Medical Officer to the Head Quarters Staff and the Victorian Artillery, during the absence of Dr. Fulton.

Hospital Reports.

MELBOURNE HOSPITAL.

Cancer or the Gall Bladder.

Under the care of Dr. **Robertson** and Mr. **FitzGerald.**

Reported by Mr. W. R. **Boyd**, M.B., late Clinical Clerk.

W. S., æt. 42, mounted constable, was admitted into ward 17, of the Melbourne Hospital, on the 19th January, 1887.

Previous History.—Seventeen years ago patient joined the Victorian mounted police force. Previous to this he had always been strong, healthy and active, and had never been laid up for any illness. Two months after joining the force, he was kicked by a horse just below the region of the liver; from the effects of this he was laid up for twelve days in the Police Hospital, but he could not give any description of his symptoms at this time. Since then he periodically consulted medical men for pain about the right hypochondrium and epigastrium; he described the pain as being of a dull aching character, increased by pressure and not affected by food. These attacks rarely lasted more than a few days, and in the intervals he felt perfectly well, though he suffered from flatulence after meals, if not very careful in his diet. He never had any discolouration of the skin during any of these attacks. Stated that he was twice in the Police Hospital, but could not recollect what ailed him at these times. He had always been a temperate, carefully living man, and particularly careful as to what water he drank. No syphilitic history.

Present Illness.—When on duty one night, about six months ago, he suddenly felt a "nasty sickly sensation" come over him, with no particular pain, no vomiting, and no distinct rigors. He immediately went home to bed and slept fairly well. The next day he consulted a medical man, and the day following he noticed that his skin was getting very yellow, that his stools were of a whitish colour and that his urine was dark. He then went to the Police Hospital, and in a few days his skin became as darkly-stained as on admission into ward 17; he then began to feel a nagging pain on the right hypochondrium, which he described as shooting, and taking his breath away. He left the hospital in six weeks, having lost fourteen pounds in weight. Until the date of admission he remained in about the same condition, though much troubled with flatulence. He had not lost any more in weight.

State on Admission.—A man of slight build, dark complexion, of bilious temperament, and apparently about the age stated; skin stained of a deep bronze colour, and conjunctivæ of a deep olive green; somewhat emaciated. Complained of a bitter taste in mouth, and of a constant dry cracked feeling about mouth and tongue; distension of the stomach after solid food; great muscular weakness and debility; itching of skin, and impairment of memory. Bowels open daily, stools of a pale drab colour, and putrid; urine dark coloured, and containing bile. Pulse 84, soft, full. Heart sounds weak, but clear; breath sounds clear.

Liver.—No increase in measurement on right side; no increase in area of liver dulness. Immediately below the border of the ribs, and a little to the inner side of the right mammary line, a distinct nodule could be detected on palpation, painful on firm pressure, and gliding beneath the fingers during a deep inspiration; to the inner side of this, some slight irregularities were palpable.

A consultation was held on the 8th of February, when it was decided to make an exploratory incision into the abdomen, with the hope of finding some removable obstruction of the bile duct, for this purpose he was transferred to ward 8, under Mr. FitzGerald.

Feb. 26.—Patient was anæsthetized, and an incision made into the abdominal cavity over the gall-bladder. On opening the peritoneum it was found that there were several hard nodules in the omentum, and one larger one at the lower border of the liver. The wound was closed with deep and superficial sutures, and a drain-tube inserted, and dressed antiseptically.

Patient gradually sank and died on the 1st of March.

Autopsy.—The body was much emaciated, the skin was of a brownish-yellow colour. There was an incised wound through the abdominal wall, several inches long, over the site of the gall-bladder. This wound was closed by deep wire and superficial horse-hair sutures. On opening the abdomen, there were found isolated hard nodules in different parts of the omentum. The stomach was greatly distended, and contained a large quantity of dark, coffee-ground-like fluid. The gall-bladder could not be seen, but at its site, the pyloric end of the stomach and the hepatic flexure of the colon were firmly adherent to the anterior margin of the liver. The gall-bladder was converted into a mass of hard scirrhus tissue, of about the size of the fist. The cavity of the gall bladder was completely obliterated. The hepatic ducts were greatly distended, looking like very large veins running through the substance of the liver. There were numerous small pale secondary malignant deposits throughout the liver. The portal vein was pressed on, but not completely obstructed. There was a deposit of new growth in the wall of the stomach near the pylorus, but the pyloric orifice was quite patent. There was no marked disease in any of the other organs.

Compound Depressed Comminuted Fracture of the Skull—Trephining—Recovery.

Under the care of Mr. GIRDLESTONE.

Reported by Dr. J. F. WILKINSON.

A. M., æt. 7 years, was admitted into the Melbourne Hospital on January 5th, 1887. He had been kicked on the forehead by a horse, about half an hour before admission.

On admission he was not unconscious, but was in a semi-sensible condition. There was a considerable laceration of the scalp, covering the upper part of the vertical portion of the frontal bone, exposing a comminuted and depressed fracture of the upper part of the vertical portion of the frontal bone, principally to the left of the middle line, and involving the origin of the longitudinal sinus. Shortly after admission, he had an epileptiform seizure, which ended with vomiting, and left him almost unconscious.

He was removed to the operating theatre and Mr. Girdlestone at once proceeded to trephine. His breathing now became very slow and feeble, and he had several epileptiform fits during the operation. Artificial respiration was kept up right through the operation. The convulsive twitchings were sometimes more marked on one side than on the other, but did not affect any one side particularly. A small trephine was applied (without the aid of an anæsthetic), to the right of the fracture, and a round piece of bone, $\frac{5}{8}$ of an inch in diameter, removed. The depressed pieces of bone were elevated and removed completely, as they had been separated from all the surrounding parts by the blow. Altogether eleven pieces of bone were removed, comprising more of the inner than the outer tables. Three pieces were nearly an inch in length. There was one large piece, 2 inches long and $\frac{5}{8}$ of an inch broad, marked with the beginning of the longitudinal sinus on its inner surface. [Fully 1¼ inch of the groove of the sinus was removed]. There was at first considerable hæmorrhage from the longitudinal sinus, but this was soon stopped by a little pressure. After removal of the bone, the breathing improved somewhat, and his pupils contracted to a point. The wound was dressed with iodoform, also eucalyptus and olive oil 1 to 3, on gauze, and allowed to heal by granulation.

On removal to the ward, he became very restless, but his breathing improved and he had no more fits. In three or four hours he was quite sensible and remembered all about the accident and told the nurse how it happened. His temperature was then 101°. Bowels confined. ℞.—Hydrarg. subchlor., gr. iij.; pulv. scammonii comp., gr. v.; fiat pulv.

Jan. 6.—Temp., 101° n., 100·6° m.; pulse, 136, weak, irritable. Is quite sensible and very bright, recognises everybody. Says he has no pain in the head; slept well; still vomiting a little; passed water himself; bowels not open. To have enema of oil. R.—Acid hydrocyan. dil., m. ij; potass. bromid., gr. v.; syrup, ʒ ss.; aq., ℥ ss.; 4 tis horis. 6 p.m., still vomiting. Skin hot and dry. Temp., 101·3°. To have nutrient enemata of beef tea, ℥ jss., with tr. opii. m.v., every four hours.

Jan. 7.—Temp., 99·2° this morning. Head dressed; wound quite sweet; sleeps well; bowels open; retains nutrient enemata; is still retching.

Jan. 8.—Temp., 100·4 n., 100 m.; pulse, 102, jerky. No pain in head; still occasional vomiting; retains most of the enemata; bowels open; tongue moist and furred. The weather for the last two days has been excessively hot, and he was now transferred to ward 8, in the hope that it would be a little cooler down stairs.

Jan. 10.—Temp., 100·8° n., 99·6° m. Has not vomited for two days. Is taking light nourishment by the mouth, with ice; has no headache; bowels open; tongue moist, coated. Wound is gaping; some sloughs have separated. The weather is still intensely hot, but the patient is doing well.

Jan. 13.—Temp. 99·4° n., 98·4° m. Is doing well; no headache; sleeps well; takes food well; bowels open; granulations are springing up over the dura mater. There is a translucent pulsating protrusion on the dura mater, about the size of a pea, apparently a small hernia of the arachnoid, caused by a protrusion of that membrane through a small puncture in the dura mater, caused probably by a spiculum of bone. The pulsations are synchronous with the heart's beat.

Jan. 17.—Temp., normal. Is doing well. The pulsating tumour has slightly increased in size.

Jan. 24.—Temp., 99·6° n., 98·4° m. Seems very well; no headache; has slight dry cough. He now had an attack of bronchitis, which caused slight elevation of temperature for a few days.

Feb. 3.—Temp., normal. Wound granulating up; granulations springing up over the pulsating tumour.

Feb. 27.—Is up and about every day. The tumour has almost disappeared, and does not suffer any inconvenience whatever from the injury.

March 1.—A very small piece of dead bone came away in the dressings.

March 15.—Wound almost healed. Is quite well.

April 4.—Wound healed. A perforated silver plate was made for him to wear over the cicatrix, and he was allowed to go home.

Case of Snake Bite.

Under the care of Mr. Girdlestone.

Reported by Dr. J. F. Wilkinson.

J. B., æt. 32, labourer, admitted March 2, 1887, at 12.15 a.m. Patient was working near Lilydale, and about seven hours before admission, a brown snake, rather less than 2 ft. long, bit him on the index finger of the left hand. The snake hung on to his finger till he knocked it off and killed it. He felt faint at once and set off to walk to Lilydale, which took him half an hour.

Whilst on the way, he became giddy and sick (vomited). His eyes became dimmed, as if a film was over them, and he saw colours like a rainbow. On arriving at Lilydale, he consulted a chemist, who applied caustic to the wound and told him to drink as much brandy as possible. Patient then started for Melbourne by train and on the way down drank a bottle of brandy. On arriving in town at 8 p.m., he bought another bottle and drank most of it. He wandered about till midnight and then walked into the hospital.

On admission, he was able to give an account of all that had happened to him. He complained of pain in the finger and left axilla. On examination, the finger was found to be swollen and there was vesication from caustic on the proximal phalanx. He says that he has been vomiting. Has severe pains in legs and ankles. There is no paralysis; the pupils act to light; the pulse is regular and full. There is no feeling of constriction about the chest; he has not been perspiring. Is very drowsy; says he cannot see well. Given Liq. ammoniæ, m.xv; aq. ℥j; every second hour. Mustard applied to epigastrium and to the calves of the legs.

March 2.—Was very delirious this morning; kept trying to get out of bed. Is now (noon) quite sensible; can give a succinct account of all that has happened to him. Has frontal headache and pain in precordial region; still has pains in shin bones; no paralysis of any part. Protrudes his tongue readily; no pains about jaws. Has had frequent micturition; bowels open; is very thirsty; was retching a little this morning. Has retained a little nourishment. Pupils are rather dilated; left pupil acts very sluggishly to light; right acts more freely. 2 p.m., given turpentine enema and hypodermic injection of hydrochlorate of pilocarpine (gr. ⅓). 5 p.m., bowels open freely; perspired profusely for about two hours, and then went off to sleep. On waking from this sleep, he had no headache and very little pain anywhere. 11 p m., has suddenly developed great enlargement of sub-maxillary glands. This swelling soon subsided.

March 3.—Slept fairly last night; has no headache now; feels sore all over precordium and left axilla; still slight pain in knees; has no paralysis. Pupils act freely to light. Pulse 72, regular, steady. After yesterday's sleep, he was much more clear-headed, and had none of the irritability and delirium of the forenoon. 11.45 a.m., pilocarpine hydrochlor. (gr. ⅓), again injected. At time of injection, pulse was 72; in half a minute it was 78; in three minutes it was 90; in nine minutes it was 90. Skin was quite dry at time of injection; in three minutes the chest, head and arms were moist; in five minutes perspiration was standing in beads over these parts. 5.30 p.m., perspired freely for two hours; says he feels very well; pupils now act freely to light. Pulse 58, regular. Brandy, 4 oz.

March 5.—Discharged; cured.

Mr. C. R. Blackett has been appointed Government Analytical Chemist, in succession to the late Mr. William Johnson.

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THE DRAINAGE OF MELBOURNE.

Every day, as it passes, makes this question of the proper drainage of Melbourne more urgent in its need of solution. And what is worse, lapse of time is making that solution more difficult, on the ground of expense, and the satisfying of conflicting interests. It is impossible that we can much longer go on pouring the sewage of the City and its chief suburbs into the Yarra, or into the swamps lying between different parts of the metropolis. The condition of the river is bad enough, but as a scandal and a disgrace to civilization, it is nothing compared with the state of the West Melbourne swamp, and the low ground between South Melbourne and the City, which have been receiving the drainage of a large population almost ever since Melbourne was founded. The matter of disposal of the sewage is certain to be taken up by the Government soon, with the view of compelling action by the local authorities. No doubt any such action will be taken as hard, the example of South Melbourne and the Sandridge lagoon being an instance of delays and difficulties, almost amounting to obstruction. The question of pollution of the low grounds, just referred to, is of immediate importance, though, of course, the first attempt at a solution will be to divert more foul water directly into the Yarra. Even that will be an improvement, especially if the out-falls are carried as far down as possible. But no such relief can be looked on as more than temporary, and if the town sewage is to be turned into the river for a much longer period, it will sooner or later be necessary to adopt some system of precipitation before that is done. And here it is that the difficulty comes in, for the sewage enters the river at so many places, that the construction of precipitation works and the carrying out of the process, would be excessively expensive.

Some general system of deep drainage, applying to the greater part of the metropolis, is almost the necessary preliminary of the full adoption of any such precipitation method, or indeed of any scientific system of sewage disposal. The necessary preliminary to that again, is the formation of the Metropolitan Board of Works, so much talked of; and all who have the well-being of the people at heart must be anxious to learn that the question is certain to be dealt with by the coming Parliament.

THE INTERCOLONIAL MEDICAL CONGRESS.

Excellent progress is being made in the arrangements for holding the Congress at Adelaide, in the end of August or beginning of September. The railway departments of the various Colonies have agreed to issue return tickets to members, for the express journey, at a single fare. All that will be required as evidence of membership, will be production of the member's ticket. The titles of a large number of papers have already been sent in, and it is necessary that intention to contribute should be intimated not later than June 30th. As to the arrangement and order of business, not much has been finally settled, but it is intended that the address in Surgery is to be delivered by Mr. Fitzgerald, of Melbourne; and that in Gynæcology, by Dr. Foreman, of Sydney. All notices of intention to take part in the Congress should be sent to Dr. Poulton, Adelaide.

We have been asked by Mr. Berkeley Hill to direct attention to an advertisement, appearing elsewhere, in which an appeal is made to old University College students, to assist in providing funds for the erection of new hospital buildings. The number of patients has been steadily increasing, and it is hoped that University College men will contribute liberally for such a good purpose; the intention being to build a hospital, which will be a model of all that is required for teaching purposes, and for the treatment of the sick. It is in contemplation to dedicate a ward in the new building to former students settled in the Colonies.

Reviews.

BRUCE CLARKE ON THE SURGERY OF THE KIDNEY.*

This work has appeared at a rather unfortunate time for the success of its circulation. Had its nascence taken place two years ago, it would have been generally received with welcome, as a sketchy monograph, that would probably be immensely improved in its second edition. But the recent appearance of Morris's work, among Cassell's manuals, has in a measure smothered the interest that would otherwise have attached to the efforts of Mr. Clarke. For not only is the former book much more complete and livelier, both in statistics and records of experiences, but there is a feeling that renal surgery is somewhat the property of the first nepho-lithotomist, who has written so extensively and done so much to develope this branch of surgery. However this may be, the book before us merits attention, especially the pages on renal hæmaturia, the diagnosis of which, as Mr. Clarke remarks, "is by no means easy to arrive at with absolute certainty," and undoubtedly, at times there is hardly anything more difficult, than to fix the seat of hæmorrhage in bloody urine. In children, where hæmaturia is generally considered as indicative of malignant disease, we have seen this symptom come and go for years, without the child being apparently in any way inconvenienced. It would seem that Mr. Clarke tired towards the end of his labours, for his chapters on pyuria, nephrectomy, and nephro-lithotomy are brief, far too brief. To abridge a description of these important phenomena and these proceedings, in a work on "the surgery of the kidney," appears to us a mistake, and is disappointing to the reader, who generally in works of this kind looks forward for some reward, after having waded through earlier chapters descriptive of the anatomy and physiology of the organ selected. Here, however, the account of the operations is short, indeed scarcely any mention is made of their history, or how they came to be practised, or of the experience of their first performers. The details too, are related in the driest manner, as if the author had not awaked to any enthusiasm about his subject. The book is illustrated by nineteen plates, chiefly of morbid conditions of the kidney, and has appended to it a useful bibliography of the subject. On the whole, therefore, though not so comprehensive as it might be, we can recommend it to those of our readers who are interested in this comparatively new department of surgical work.

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* The Diagnosis and Treatment of Diseases of the Kidney, Amenable to Direct Surgical Interference, by W. Bruce Clarke, F.R.C.S. London: H. K. Lewis, 1886.

J. H. W.

RUDALL ON DEFECTS OF VISION.*

This *brochure* is the outcome of a discussion, which took place recently at meetings of both the local medical societies and in the daily press.

The practical point at issue was the advisability of appointing ophthalmic experts to examine the vision of candidates for employment in the railway and marine services.

Mr. Rudall, in supporting this contention, indicates that the refraction and physical condition of the eye have not been tested hitherto in the Victorian services, and that the examination has been therefore of the character known to ophthalmologists as "subjective."

It seems that the railway medical inspector said that "If any candidate was willing to see as well as he could, any medical man could test his powers of vision by Jaeger's or Snellen's types."

Mr. Rudall points out in reply, that in the first place, such an examination does not give a proper guarantee of fairness until a standard of vision has been decided upon (as in the Continental armies).

Then he points out the fallacies that may interfere with the perfect reliability of any mere reading test. For example, the overlooking of cases of choroiditis (which might not be central at the time of examination, and consequently did not then interfere with vision); of cases of hypermetropia, in which the acommodation was strong enough to overcome the defect at the time of examination, but might not suffice under other conditions.

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* Color-Blindness and other Defects of Sight in some of their Medico-Legal Aspects, by James T. Rudall, F.R.C.S. Eng. Melbourne: Geo. Robertson, 1887.

The original subject of the controversy, colour-blindness and its detection, is also discussed in this *brochure.* It seems that Mr. Rudall believes that, to be accurate, the test for colour sense, by the use of Holmgren's wools, must be supplemented by an examination of the acuity of the *distant* colour vision.

J. W. B.

MACKENZIE ON THE SPUTUM.*

This book, which forms the first of a projected series of "Essays on Respiratory Diseases," while it does not profess to be "an exhaustive, microscopical, or chemical analysis of all the constituents of the sputum," gives a very full and careful description of the chief of these constituents, which have importance from the diagnostic, prognostic, or therapeutic point of view. As might have been expected, a large portion of the space is taken up with phthisis, and in particular, with the discovery of Koch's bacillus, and the various indications derived from its presence. As might also have been expected, from the reputation of the publishing house, the numerous illustrations, chiefly lithographs, coloured or plain, and separately printed, are exceedingly good, and add greatly to the value of the book. We can recommend Dr. Mackenzie's book to the attention of our readers, and especially to those engaged in clinical work. Independently too, of its scientific interest, it is of practical value on account of the directions about the treatment of laryngeal and thoracic diseases, carefully recorded cases giving point to the more general directions.

J. J.

We have received from Messrs. Burroughs, Wellcome and Co., a copy of their Medical Diary, for 1887. In the main, it is an exact reproduction of the well-known Letts's Diary, with some additions to the matter prefixed. It has been issued too late to have a large circulation this year, but the next issue is likely to be favourably received.

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* A Practical Treatise on the Sputum, by Hunter Mackenzie, M.D. Edinburgh and London: W. and A. K. Johnston, 1886.

Extracts from the Medical Journals.

At the meeting of the Physiological Society of Berlin, on October 29, Dr. J. Munk reported on experiments instituted by him in the course of the last two years, with a view of arriving at an experimental decision between the two theories of the secretion of urine: the filtration theory of Ludwig, and the secretion theory of Heidenhain. According to the first theory, the blood-pressure prescribed the measure for the urine secretion; according to the second theory, the urine got secreted from the secretory epithelial cells of the kidneys, and the quantity of the matter secreted was dependent on the rate of movement of the circulation of the blood. The speaker had instituted his experiments on excised but living kidneys, through which he conducted defibrinised blood of the same animals, under pressures which he was able to vary at pleasure between 80 mm. and 190 mm. Fifty experiments on dogs, whose blood and kidneys were, during the experiment, kept at 40°C., yielded the result that the blood of starving animals induced no secretion of urine, which, on the other hand, showed itself in copious quantities where normal blood was conducted through the kidney. If to the impoverished blood was added one of the substances contained as ultimate products of digestion in the blood, such, for example, as urea, then did the secretion ensue. The fluid dropping from the ureter contained more urea than did the blood. That fluid was therefore no filtrate, but a secretion. An enhancement of the pressure of the blood flowing through the kidney had no influence on the quantity of the secretion passing away. An increased rate of movement on the part of the blood, on the other hand, increased in equal degree the quantity of urine. On a solution of common salt or of mere serum sanguinis being poured through the kidney, no secretion followed. All these facts, involving the exclusion of the possibility of a central influence being exercised from the heart or from the nervous system on the kidneys, were deemed by the speaker arguments proving that the urine was secreted by the renal epithelial cells. A series of diuretics was next tried, in order to establish whether they operated in the way of stimulus centrally on the heart or peripherally on the renal cells. Digitalis was a central diuretic.

Common salt, on the other hand, was a peripheral diuretic. Added in the portion of 2 per cent. to the blood, it increased the quantity of urine eight to fifteen-fold. Even in much less doses, it was a powerful diuretic. In a similar manner, if yet not so intensely, operated saltpetre and coffeïne, as also urea and pilocarpine. On the introduction, however, of the last substance into the blood, the rate of circulation was accelerated in an equal measure as was the quantity of urine increased, so that in this case the increase in the quantity of urine was, perhaps, exclusively conditioned by the greater speed in the movement of the blood. On the other hand, the quantity of secreted urine was reduced when morphine or strychnine was added to the blood. In the case of the application of strychnine, the rate in the current of the blood was retarded in a proportion equal to the reduction in the secretion of the urine. The speaker had, finally, demonstrated the synthesis of hippuric acid and sulphate of phenol in the excised kidney as a function of its cells, by adding to the blood pouring through the kidney, in the first place, benzoic acid and glycol; in the second place, phenol and sulphate of soda. In order that these syntheses might make their appearance in the excised kidney, the presence of the blood-corpuscles was not necessary, though, indeed, the presence of oxygen in the blood was indispensable.—*Nature*, December 30, 1886.

On Dilatation of Urethral Strictures, of Large Calibre, in the Treatment of Gleet.

Dr. F. N. Otis says that the results of such treatment can only be temporary; for a permanent cure a complete division of the stricture is necessary. However, as in many cases the treatment by gradual dilatation will be required, he gives some directions for its proper performance. He uses a solid metal sound, with a highly polished surface, steel or nickel-plated, with its extremity so curved that it naturally follows the course of the urethral canal, readily conforming to the sub-pubic curve. In passing the instrument it *is the rule* to meet with obstruction at the bulbo-membranous junction. The simple weight of the instrument, allowed to bear steadily against the face of the closed walls for a few seconds, will usually cause the contraction to yield, when, slowly depressing the handle of the sound, it will glide easily into the bladder. At least two days should be allowed to elapse before again introducing the instrument. In many cases in which he explores the urethra, he does not pass the instrument into the bladder. There is no danger in passing an intrument gently down to the membranous junction, but there always is danger in passing it beyond that point into the bladder.—*Journal of Cutaneous and Genito-Urinary Diseases*, February 1887.

University Intelligence.

MELBOURNE UNIVERSITY.

At the meeting of the Council, leave of absence for six months was granted to Dr. Robertson.

The following motion was adopted with reference to Clinical teaching: "That two of the physicians attending the in-patients of the Melbourne Hospital be appointed Clinical Lecturers on Medicine, and that two of the surgeons attending the in-patients at the Melbourne Hospital be appointed Clinical Lecturers on Surgery, until the end of the July Term, at a salary at the rate per annum of £125, together with one-fourth of the fees paid to the University for Clinical Lectures in Medicine and Surgery, provided that these two sums do not together amount to more than £250. The Council will require that a regular lecture roll of the attendance at these lectures be kept." It was decided to ask the Faculty of Medicine to nominate four of the medical officers of the Hospital as Clinical Lecturers.

At the meeting of the Council, on the 2nd inst., Dr. Brownless was elected Chancellor, and Professor Irving Vice-Chancellor, for the year ending 30th April, 1888.

The Chancellor submitted a report of the Building Committee, stating that Professor Spencer had submitted plans and specifications for the erection and equipment of a biological theatre and laboratory, at an estimated cost of £13,000. The Committee recommended that the plans should be adopted, and that the Treasurer of Victoria be asked to place the sum of £13,000 on the Estimates, in order to enable the work to be carried out. The report was adopted.

The Faculty of Medicine forwarded a report concerning the fees payable by medical students in respect of hospital attendance, clinical lectures, and post-mortem demonstrations for the current year, and suggestions as to their mode of distribution. A way was suggested whereby the Council might be able to offer £250 a year to each Clinical Lecturer, instead of a proportion of £500 and fees. The following motion was adopted: "That the positions of Clinical Lecturers on Medicine be offered to Dr. Williams and Dr. Moloney, and the positions of Clinical Lecturers on Surgery be offered to Mr. Fitzgerald and Mr. Girdlestone, until the end of the July Term, on the following terms: The grant of £500, together with the fees paid to the University for Clinical Lectures in Medicine and Surgery in 1887, shall be divided among the four gentlemen who act as Clinical Lecturers for 1887, and that the four gentlemen now appointed be paid at this rate till the end of the July Term.

At a meeting of the Senate on the 3rd inst., H. B. Higgins, M.A., L.L.B., the only candidate nominated, was elected a member of Council in the room of Professor M'Coy, resigned.

At the Annual Commencement, on the 16th ult., the following degrees were conferred:

Doctor of Science.—Alfred Henrick Jackson, Victoria University (*ad eundem*); David Orme Masson, Edinburgh (*ad eundem*); Frederick M'Coy, Cambridge (*ad eundem*).

Doctor of Medicine.—James William Barrett; William Simpson Flett, Edinburgh (*ad eundem*).

Bachelor of Medicine.—Hugh Alexander Deravin, Thomas Hodgson, Martin Magill, Charles Donald Russell.

Bachelor of Surgery.—Alfred Victor Millard Anderson, Eugene Wilton Anderson, William Robert Boyd, Henry O'Brien Deck, Hugh Alexander Deravin, Carl Peter Wilhelm Dyring, George James Archibald Billing Halford, William Kilpatrick, Martin Magill, William Lowell Mullen, Albert Alexander Parry, George Campbell Rennie, Edward Emerson Rosenblum, Charles Donald Russell, Edward Ryan, James Service Thomson.

The following is the Class List for the fifth year medicine, the result of the Honour Examination recently held:—

First Class.—Alfred Victor Millard Anderson.

Second Class.—George Campbell Rennie, William Robert Boyd, George James Archibald Billing Halford, James Service Thomson, Edward Emerson Rosenblum, Robert James Loosli and Hugh Alexander Deravin (equal).

Third Class.—Albert Alexander Parry.

Scholarships.—The scholarship for medicine and forensic medicine, and also that for surgery, were awarded to Alfred Victor Millard Anderson.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee on the 19th ult., Mr. G. Godfrey, pursuant to notice, moved that Dr. J. W. Barrett be appointed honorary oculist to the Hospital. After some discusion the motion was ruled out of order, on the ground that the Committee had no power to make such an appointment.

At the meeting on the 3rd inst., it was agreed to rescind the resolution doing away with the salary of resident medical officers. It was decided, further, that the salary of £50 should be paid at the end of a year's service, and should be forfeited if the full term was not kept. On the recommendation of the Elections Committee, Drs. A. Anderson, G. Rennie, W. Boyd, G. Halford, and J. Thomson, the five first honourmen at the last University examination, were appointed as the resident medical officers for the ensuing twelve months.

WOMEN'S HOSPITAL.

At the meeting of the Committee on the 15th ult., the following resolution was adopted :—"That it is desirable, in the interests of the Hospital and of the students, that the lecturer on obstetrics at the University should be a member of the honorary medical staff, and pending definite arrangements, that the present lecturer, Dr. Jamieson, be appointed to take charge of Dr. Balls-Headley's patients during his absence on leave."

Tenders for the erection of the new building were considered, and one, to the amount of £10,640 7s. 6d., was accepted.

Arrangements have been made for the immediate commencement of the work, which has to be completed within nine months.

At the meeting on the 29th ult., Dr. Eugene W. Anderson was elected senior resident medical officer, in place of Dr. Hooper, who has resigned for the purpose of entering on private practice. The position of assistant medical officer was offered to Dr. R. H. Fetherston, and has since been accepted by him.

A complaint having been made against Dr. Hooper, the late resident medical officer, a letter was received from him, and the whole matter was referred to a sub-committee, consisting of members of the gentlemen's committee.

Vital Statistics.

The report of the Government Statist on the vital statistics of Melbourne and suburbs, for March 1887, shows that the births of 1325 children, viz., 678 boys and 647 girls, were registered during the month.

The deaths registered numbered 829, viz., 477 of males and 352 of females.

To every 1000 of the population of the district, the proportion of births was 3·57, and of deaths 2·23.

One hundred and twenty-five deaths occurred in public institutions.

The number of children under one year who died was 272, the total number under five years being 368.

As compared with the experience of the previous month, there was a decrease of 53 in deaths from specific febrile or zymotic diseases. Under this head, deaths from typhoid fever fell from 70 to 59, and those from diarrhœal diseases from 113 to 78. There was, however, an increase of 16 in deaths from constitutional diseases, and of 42 in deaths from local diseases. Under the constitutional head, deaths from cancer rose from 12 to 26, and those from phthisis from 62 to 88; but deaths from tabes mesenterica fell from 21 to 12, and those from tubercular meningitis from 16 to 5. Under the local head, deaths from brain and nervous diseases rose from 83 to 104, those from heart affections from 36 to 40, and those from lung and chest complaints from 51 to 65. Six deaths of child-bearing women occurred during the month, as against 14 in February. If these numbers be compared with the births registered during those months, it follows that 1 death of a mother took place to every 221 children born alive, as against 1 to every 74 such children in the previous month.

Local Subjects.

Medical Board of Victoria.—The following gentlemen have registered their qualifications:—William Thomas Mullally, Fitzroy, M.D. et Ch. M. Q. Univ. Irel. 1880, L. Mid. K.Q.C.P. Irel. 1886; James Bennett Hayes, Melbourne, L. et L. Mid. R.C.P. et R.C.S. Edin. 1880; Abraham Haynes, Benalla, L. et L. Mid. R.C.P. et R.C.S. Edin. 1886; John Taylor Chapman, Carlton, L. et L. Mid. R.C.P. et R.C.S. Edin. 1886, L.F.P.S. Glas. 1886; Martin Magill, Melbourne, M.B. et Ch. B. Melb. 1887; Robert Louis McAdam, Melbourne, M.B., Ch. B. M.D. Dubl. 1886; Charles Donald Russell, Williamstown, M.B. et Ch. B. Melb. 1887; Hugh Alexander Deravin, Sandhurst, M.B. et Ch. B. Melb. 1887; James Davies Llewellyn, Melbourne, L.R.C.P. Lond. 1886, M.R.C.S. Eng. 1882, L.S.A. Lond. 1882; Thomas Hodgson, Melbourne, M.B. et Ch. B. Melb. 1887; William Moir, Warracknabeal, M.B. et Ch. M. Aberb. 1883; John Francis Molyneux, Williamstown, M.R.C.S. Eng. 1883; L. et L. Mid. R.C.P. Edin. 1883.

Additional qualifications registered:—Ezra H. Williams, Fitzroy, M.D. et Ch. M. Univ. of Trin. Coll. Toronto, Canada 1884; Edward E. Rosenblum, Ballarat, Ch. B. Melb. 1887; James S. Thomson, Oakleigh, Ch. B. Melb. 1887; William R. Boyd, Sandhurst, Ch. B. Melb. 1887; William S. Flett, Fitzroy, M.D. Edin. 1886, M.D. Melb. 1887 (*a.e.g.*); Samuel Connor, Coleraine, M.O. R. Univ. Irel. 1885, James W. Barrett, Melbourne, M.D. Melb. 1887.

Health Officers.—The following appointments have been confirmed:—Town of Brighton—Charles Nathaniel Simons, L.R.C.S., *vice* Cornelius Gavin Casey, M.R.C.S., resigned; Shires—Minhamite—William Sidney Ridout Woodforde, M.B., *vice* John Fulford, L.R.C.P., deceased; Whittlesea—Edwin J. Bird, M.B., *vice* R. E. Weigall, M.B., resigned; Nunawading—William Miller Dickinson, M.B., *vice* William Augustus Sparling, L.R.C.P.; Kowree—George Fox, L.R.C.P., for one year, during the absence on leave of F. D. Hayman, M.R.C.S.; Dunmunkle, East Riding—James Crockett Hood, M.D.; Borough of Queenscliff—Thomas Dawson Moore, L.R.C.S., *vice* Walter Scott, M.R.C.S., resigned.

Public Vaccinators.—The following appointments have been made:—Swan Hill—Charles William Pardey, M.B., *vice* James Graham, M.B., who has left the district; Dean's Marsh and Lorne—George Marr Reid, M.B., *vice* D. W. B. Wilkie, M.B., resigned; Kerang—Francis Elliot Corbet Singleton, L.R.C.S., temporarily, during the absence through illness of William Gregory, M.D.; Beechworth—Henry Tregellis Fox, M.R.C.S., *vice* M. F. Cleary, L.R.C.S., resigned; Kyabram—John Henry Carney, M.B., *vice* W. Guy M'Lennan, M.R.C.S., resigned; Rupanyup—James Crockett Hood, M.D.

His Excellency the Governor presented the certificates of proficiency gained by the pupils of the St. John Ambulance Association, at the Masonic Hall, on the 25th ult. The annual report set forth that the number of classes had increased during the year from 16 to 32, and that the work of the association was advancing in public estimation. Out of 716 pupils, 415 had become duly qualified and received certificates. Since the inauguration of the society, 1353 pupils had attended its classes. No fewer than 287 railway employés hold the association's certificates. During last year 14 railway classes were opened, and 194 of the pupils obtained certificates. Members of the police force are also to be instructed in the work of rendering "first aid" to the injured, and, as a special incentive to attain efficiency, they will receive certain advantages with regard to leave and promotion. Lady Clarke has generously undertaken to defray the cost of establishing six litter stations in Melbourne, so that injured persons may be removed with a minimum of suffering, and these stations are to be supplemented by the introduction of the horse ambulance system. As only £190 is required for the purchase of a waggon, it is hoped that a fully-equipped ambulance service will be in operation in the course of another year.

The annual meeting of the Melbourne Medical Students' Society was held on Thursday, 21st ult., at the Melbourne Hospital, the president of the society, Professor Allen, presiding. There was a large attendance of members. Dr. C. P. Dyring, in presenting the seventh annual report, congratulated the society on an exceedingly prosperous year. The report stated that the roll of members for 1886 reached 121, exclusive of honorary members, and that, notwithstanding the somewhat heavy expenses, the treasurer, Dr. R. J. Loosli, was able to declare a credit balance of £55. The report referred briefly to the action of the committee of the society *in re* the Women's Hospital, the November botany paper, the clinical lecture question, the students' club room, and congratulated the members on a successful result in all issues. The report was then unanimously adopted, and the following office-bearers elected for the year 1887-8:—Honorary secretary, Mr. C. E. Goodall; honorary assistant secretary, Mr. R. W. Lewers; honorary treasurer, Mr. J. Bartley.

The usual fortnightly meeting of the Society was held on the 5th inst. Mr. T. N. Fitzgerald presiding. Mr. R. R. Stawell read a short paper on "Massage," detailing its subdivisions, explaining its uses and modes of application by demonstration, and setting forth its physiological actions. Mr. Fitzgerald, in congratulating Mr. Stawell on his paper, referred briefly to the dangers liable to result from the practice of this treatment in unskilled hands. Dr. F. Bird admitted the great value of massage as a therapeutic agent in many cases, but pointed out very clearly its power for evil if ignorantly applied.

Central Board of Health.—At the meeting of the Board on the 13th ult. Dr. Shields reported that seventeen cases of typhoid fever had occurred at Lilydale, in consequence, as he believed, of a patient having gone there from Melbourne.

At the meeting on the 29th ult., Dr. Shields reported that in the township of Tungamah, there had been twenty cases of typhoid in a population of 250, and that diphtheria had also been prevalent in the district. The township was very badly drained. It was resolved to transmit the report to the

Lands Department, directing attention also to Telford, a township similarly situated in the same district. It was stated that Mr. Thwaites of the Public Works Department had reported on the condition of the West Melbourne swamp, recommending that steps should be taken to compel the neighbouring municipalities to stop the flow of offensive drainage into the channels through it.

It was resolved that the Government should be asked to continue the appointment of Mr. Butler as Assistant Sanitary Inspector till the end of June.

At the meeting on the 9th inst., the Secretary of the Alfred Hospital wrote, stating that it would be well to line the tents now used for typhoid cases, owing to the cold. The Board was of opinion that the tents might now be removed, the pressure of cases having diminished. The hospitals were to be asked whether they could not accommodate the patients.

BIRTHS.

Bird.—On the 24th ult., at Boort, the wife of Dr. W. J. Bird, of a son.

O'Brien.—On the 22nd ult., at the Metropolitan Asylum, Kew, the wife of Dr. J. A. O'Brien, of a son.

Pardey.—On the 29th ult., the wife of Dr. C. W. Pardey, of Swan Hill, of a daughter.

Smith.—On the 17th ult., at her residence, Collins-street east, the wife of Dr. L. L. Smith, of a son.

Syme.—On the 29th ult., at her residence, Main-street, Stawell, the wife of W. H. Syme, surgeon, of a daughter.

Vance.—On the 4th inst., at the Bungalow, Bacchus Marsh, the wife of Dr. Noel Vance, of a daughter.

MARRIAGES.

Daish—Barrett.—On the 27th ult., at St. Luke's Church, South Melbourne, by the Rev. Canon Dickinson, M.A., William Christian Daish, M.B., Ch. B., son of the late William Daish, South Melbourne, to Alice, second daughter of Dr. Barrett, South Melbourne.

Davenport—Sievwright.—On the 28th ult., at Holy Trinity Church, Hobart, by the Ven. the Archdeacon of Hobart, father of the bridegroom, Arthur Frederick Davenport, M.B. Lond., M.R.C.S. Eng., of St. Kilda, Melbourne, to Alline, daughter of the late Major Allan Sievwright, Royal Artillery.

Johnston—Pelling.—On 2nd March, at the residence of the bride's parents, "The Hawthorn," Nathalia, by the Ven. Archdeacon MacCullagh, of Sandhurst, assisted by the Rev. H. J. Mitchell, John Johnston, M.B. et Ch. M., J.P., to Bessie, eldest daughter of Alan Pelling, Esq., J.P.

Morrison—Mann.—On the 13th ult., at Christ Church Pro-Cathedral, Ballarat, by the Venerable Archdeacon Julius, William Morrison, M.D., to Eleanor Frances, fifth daughter of S. F. Mann, solicitor, Ballarat.

DEATHS.

Foster.—On the 11th inst., by railway collision, Mary Annie, beloved wife of Dr. Foster, of Colac.

Ryan.—On the 16th ult., at her residence, Yarra Bend, Anna Maria, wife of Dr. T. B. Ryan, aged 25 years.

Vance.—On the 4th inst., at Bacchus Marsh, Clive Ada, infant daughter of Dr. Noel Vance.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in Pamphlet form by communicating with the Publishers before the issue of the *Journal.*

THE
Australian Medical Journal
JUNE 15, 1887.

THE MEDICAL SCHOOL OF THE MELBOURNE UNIVERSITY.*

By JAMES EDWARD NEILD, M.D.

Lecturer on Forensic Medicine.

(Continued from page 199.)

The Medical School buildings, some years ago, were found inadequate to the requirements of the students. When they were built, they were declared to be unnecessarily large, although, as I have said, architecturally mean, and for some time they were more spacious than appeared to be necessary, so that, for several academic years, I and some of the other lecturers used to meet our classes in the library, and sit comfortably by the fire, so small was the party. This was not perhaps very dignified, but then it does not seem easy, and indeed it is, in its way, absurd, to insist upon dignity when you are talking to only three or four persons. But when the class mounts up to thirty or forty, it is different. Dignity and deportment are then unavoidable. But it was not alone the maintenance of dignity and deportment that was necessary. The dissecting room was found to be altogether too small, the chemical laboratory had out-lasted its suitability, and the physiological laboratory would hold only a percentage of those who desired to work there. So, on the 23rd of May, 1883, a deputation from the Council waited upon the then head of the Government, Mr. Service, asking for a special Government-grant for enlarging the buildings of the School. And I am pleased to record that the Premier met the deputation in an encouraging manner, nor did he limit himself to the manner of dealing with the application, but promised, and subsequently performed his promise, to get £10,000 voted for the proposed new buildings. To this sum other amounts have since been added, and it is believed that more will be forthcoming when asked for. As a result of this liberal recognition of the needs of the School, very large additions have been made to our buildings. The style of architecture is wholly different from that of the original structure, for while this latter is of the spurious classic order, and as I have already said, in brick and stucco, the new portion is of respectable Elizabethan Gothic, and the material is good honest freestone. The inside arrangements are not less satisfactory. There is a dissecting room, with ancillary offices that could not be bettered in any school in the world. There are large museums for anatomical and patholcgical specimens, a commodious new theatre, and several other apartments, each one having its own particular use; but the building is by no means finished. It shows an architectural raw stump on its eastern side, and the western façade has yet to be blended with the original building, whose poverty-stricken stucco wall ought to be effaced. The old building has also undergone some modifications. A few years ago a chemical laboratory for the students was added, and now the dissecting room has been transformed into a physiological laboratory; the chemical theatre is being enlarged, the old museum is shortly to be turned into a library, and the room hitherto used as a library is to be allotted to the students as a common room. This room, I may say, is all too small for this purpose, but as, up to the present, the medical students have had no room at all—a grave neglect, I take it—they will be, at least, a little better off than they have been. And concerning the library of the Medical School, something has to be said. It was brought out by Professor Halford nearly twenty-five years ago, and it remains numerically very much as it was then. Very few additions have been made to it, the Council having, until recently, displayed a persistent parsimony towards both it and everything else connected with the Medical School. But now, the library is to make a new departure. The books are to be decently shelved, the room is to be reasonably well furnished, and the sum of £150 a year is to be devoted to its maintenance. It is not a large sum, but it is hoped that the Council will, after a while, melt into a modified tenderness, and that the allowance of £150 will expand accordingly.

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* Address on the Twenty-fifth Anniversary of the Opening of the Medical School. Delivered in the Wilson Hall, on March 23rd, 1887.

I think it will be seen, therefore, that a good deal has been done to make the School an efficient means of teaching the science of Medicine, and that there is no need for our young men to go to Europe to learn their profession. I do not forget that the disposition to undervalue everything Australian has not seldom found its expression in a sneer, both at our University generally and our Medical School especially. Even the Council itself has not been entirely free from this kind of prejudice, seeing that two of its members have sent their sons to Europe to be medically educated. But I do not think the prejudice is increasing, and I feel confident that every year will tend to diminish it. My belief on this point is the more assured, when I remember how more than creditably our medical graduates have acquitted themselves, both as practitioners in the ordinary work of their profession, and as the occupants of offices in which exceptional medical knowledge is necessary. I might mention many names of gentlemen, whose medical training has been wholly obtained in this University, who are properly regarded with respectful consideration by those most competent to judge of them. It may suffice, however, to speak of one, who, being most nearly under my own observation, has supplied me with larger and more frequent opportunities of judging of him. Need I say that I refer to Professor Allen? This gentleman, a native of Victoria, educated entirely within the colony, and never having had the opportunity of studying in those larger spheres of observation, supplied in the great capitals of Europe, has, nevertheless, completely mastered the several sciences which make up the great collective science of Medicine. I do not think that, of any branch of that science, Professor Allen is not an expert. I have watched his career from the time he entered as a matriculated student of this University; I have observed every step he has taken, and I can assert, with truth and emphasis, that he has never taken a retrograde step. His watchword seems always to have been "Onward!" and he has consequently secured the leading position it was, I make no doubt, always his object to arrive at. Nor has he obtained this end in any circuitous or fortuitous fashion. He has tried to deserve his success, and he has gained his success because he has deserved it, and for no other reason. As one of his teachers, I am very proud to have taken part in his education. I regard it as a distinction to have had a share in instructing a man who does such credit to his profession and to his Alma Mater, and I know that my feeling towards him is shared, not only by every other member of the teaching staff of this School, but by the whole brotherhood of Medicine throughout the colony. I point to him as an example to all the other students, past, present, and to come.

In speaking of Professor Allen I cannot forbear expressing myself strongly in deprecation of the treatment he has received at the hands of the Council in connection with the Pathological Museum. This collection had been accumulating for several years at the Melbourne Hospital under his especial direction, for which work he was paid a salary by the Hospital Committee. Believing that its usefulness, and therefore its value, would be increased by its removal to the Medical School of the University, and the Council having expressed a wish that it should be so removed, he, having procured the consent of the Hospital Committee, had it taken thither. The Committee, of course, having no longer any museum to take care of, could not pay a curator, and Professor Allen naturally looked to the Council to continue the salary he had been receiving. But the Council, having got the collection, declined to pay for its superintendence, insisting that Professor Allen's salary, as Professor of Anatomy and Pathology, included any remuneration he might look for as custodian of the museum. After much discussion, they have consented to pay him a *douceur*, with an understanding that they disavow all obligation for the future, and that the reward of the trouble Professor Allen has taken to benefit the University must be of the *mens conscia recti* kind. I think there will be no difficulty, in any honourable man's mind, how to define this remarkable proceeding.

In like manner, perhaps, are to be explained the occasional rebuffs administered to the Faculty of Medicine by the Council. The Faculty of Medicine is a body of comparatively recent creation, that is to say, it is only eleven years old; and it is regarded by the Council, therefore, as a rather presumptuous department of the University. It is true that the fourth section of the statute, setting forth the functions of the Faculty, defines its duty to be "the considering, reporting to, and advising the Council upon all questions relating to the studies, lectures, and examinations for degrees in Medicine, and for selecting persons to be reccommended by the Faculty to the Council as qualified for appointment," and so on. Now the Faculty, in their official innocence, have regarded the instructions contained in this statute, as the guide of their conduct, and have, from time to time, "advised" the Council on matters connected with the School. But the Council have sometimes not taken the advice kindly. They have apparently regarded the advice as irreverent, and, to mark their sense of the liberty taken, they have, now and then, adopted a course, as it would seem, opposite to that pointed out to them, and I am not quite sure if the Faculty have fully recognised the salutariness of these inferential rebukes. Indeed, judging from the manner in which the rebukes have been received at the meetings of the Faculty, I am disposed to think that contrition under reproof is not a leading attribute in the corporate mind of the Faculty. Nevertheless, I discover no falling off in the Council's practice of asking for advice, and there are one or two very sanguine members of the Faculty who seriously believe that, some day, the Council will act upon it. With the utmost deference, not to say awe, when speaking to so potential a body as the Council of the University of Melbourne, I would venture to suggest that it would be more convenient, and certainly easier, to remit most medical questions to the Faculty, instead of appointing medical committees in the Council, which committees, for various reasons, may not deal with the matters so exhaustively as the Faculty would.

As may readily be supposed, the course of study pursued in the School, although originally framed with great care, has been, from time to time, modified as circumstances have made necessary. During last year, the curriculum underwent a complete revision, after experiencing close criticism. When, at last, it became the law of the University, it was acknowledged to be a complete scheme, for it included every branch of study, general and special, required to confer a thorough knowledge of Medicine. By some it might be pronounced to be too exacting, by others too exhausting. The object of the framers was to provide a mode of testing, but not of perplexing the candidate. It is said to be too technical, but it is hard to see how such a course of study can be too technical. One special requirement, however, is now insisted upon, namely, clinical knowledge. The candidate must have learnt in a hospital how to recognise and how to treat disease, and, therefore, there is now more adequate provision made for bedside instruction. For many years the reproach has been flung at the School that it did not include instruction of this kind, and that the student only learnt the art of diagnosis in a desultory manner. This is true to some extent. The University has no control over the Hospital, and even the Hospital Committee has shown no disposition to further the interest of the University, but has manifested a positive antagonism and dislike to it. The medical staff for the most part have not been unwilling to teach students, but the clinical teaching has been given as it suited their convenience, and it is only by giving himself up to that part of his instruction, that a student can hope to secure it. Now, however, this is to be altered; but the system can never be complete till the

University has the power, not only to appoint its own clinical teachers, but also of electing them to the medical staff of the Hospital. No doubt the absolute separateness of the Hospital and the University has helped, not a little, to promote the antagonism between the two institutions. When, thirty years ago, the scheme of the Medical School was first mooted, it was urged by some that it ought to be a part of the Hospital, that, in fact, like the schools in the old country, it should grow out of the Hospital, and be identified with it. This plan not being adopted, it was then hoped that as the School was not blended with the Hospital, a Hospital might be added to the School; and when the Alfred Hospital was first contemplated, it was proposed to build it on the ten acres south of the School, facing Madeline-street. In my opinion, there is no reason why this should not have been done, and despite the opposition of the City Council, a section of the Hospital Committee, and the Government, I am satisfied that this would be a suitable site for the new Melbourne Hospital.

It will be expected, and very properly, that I should say something about the admission of young women to the medical classes of this school. Six applications from young women have been made to be so admitted, and the Council have resolved that the applications shall be allowed. I do not propose, therefore, at this moment to discuss, at any length, the principle of women engaging in medical practice. It has for many years been a debatable question, and it is by no means settled yet, for all that some women in Europe and America have graduated in Medicine, and are understood to be engaged in the successful practice of it. On the expediency of women studying Medicine, there are, as I need hardly say, very diverse opinions, and these opinions have, from time to time, been expressed with much unnecessary warmth on both sides. Nobody in these days of social change will deny the perfect right of a young woman to study anything she pleases, but when we are told by the strong advocates of this right, that medical women are an absolute necessity, I take leave to enter my dissent from such an assumption. It is contended that a certain class of diseases to which women are liable, can be properly dealt with only by women, and that women so suffering will prefer to suffer rather than consult a medical man. Against this assertion I offer the replies I have received to questions I have put to women, as to their preference of their own sex or otherwise, and they have all told me that they have more confidence in a medical man than a medical woman. I am aware of the possible objection to this statement, that my own experience may represent only a small proportion of the general preference. I give it, however, for what it is worth, but with a strong belief, nevertheless, that it samples the average feminine opinion on the subject. It is not, however, to this part of the question that I am now addressing myself. I will assume it as proved, that there exists a necessity for medical women, and that, therefore, the demand necessitates a supply. It has then to be considered in what way the education of medical women is to be conducted, and, at once, I insist that, if we are to regard women as equal in intelligence and intellectual capacity to men—and I for one do so regard them—then there is no escape from the necessity of their going through exactly the same educational process as men do. Any attempt to admit women to the medical profession by the side-door of less exacting conditions, could result only in procuring for them a position of inferiority, which would be unjust to themselves, and dangerous to those whom they might have to treat. I think the prospective medical woman admits this. She has too much self-respect, and too lively a consciousness of her social rights, to accept a qualification which would not be as complete as that possessed by her male compeer. We have, then, to consider how far it is practicable or desirable to teach mixed classes. Here, also, there is some difference of opinion, and in a communication addressed by the Council of this University to the Faculty of Medicine, requesting this latter body to frame regulations for the teaching of female medical students, it is apparently assumed that mixed classes of male and female students are not possible. The reply of the Faculty to that communication has not yet been made public, but as it is intended to be published, I do not think I am betraying any confidence, in saying that a majority of the Faculty have decided that no special regulations are required; but that if the Council insist upon such exceptional regulations being framed, it will involve a very large addition to the existing outlay in the Medical School. It will be seen, therefore, that this matter of details in the curriculum is not yet settled as between the Council and the Faculty. In the meantime, it is open for us to inquire, if in any subject of the medical course, separate classes are necessary? It is admitted, on all sides, that every subject must be learned, without any reservation, by young women equally with young men, and it is not less certain that the teachers of these subjects to women must be men, at any rate for some time to come. But when it is proposed that the class to which the subjects are taught shall consist of persons of both sexes, it is discovered that objections on the score of delicacy forbid it. I trust to be pardoned for dealing with this matter somewhat plainly; but as I could not well admit alluding to it, and as it would be only false modesty to evade the real point at issue, namely, that of the mixed classes, I therefore make this mention of it. For my own part, I cannot perceive any absolute or abstract indelicacy in male and female students listening together to a lecture upon any scientific subject, if only it be regarded, and I think it may be so regarded, in the cold light of science. It is a very old aphorism, but it contains a perpetual truth, that "to the pure all things are pure," and it is equally incontrovertible that while there is a soul of goodness in all things evil, it is possible to discover evil in things essentially good. It is not a little curious, however, that while it is insisted that women-students shall be taught in separate classes, when studying medicine in a medical school, it is never regarded as necessary to segregate them when they go to learn the duties of a nurse in hospitals. There they mix freely with the other sex, and are present at all manner of operations, without being considered to forego, in the very least, their claim to be considered pure-minded women; and it is I think at least as possible to preserve this attribute of pure-mindedness in the lecture-room as in the wards of a hospital, and the operating-theatre. And I may be permitted to say, that I have sufficient confidence in the manliness and chivalry of the young-men-students of this School, to be quite sure that they would comply with all the obligations towards their fellow female students which the most fastidious propriety might require.

In speaking of the Medical School, it is right that I should say that part of the objection of parents to send their sons to it has arisen from the belief that its degrees were not recognised in Great Britain. This objection, however, now no longer exists, as the amended Medical Act of Great Britain provides for the registration of the degrees of Colonial Universities. Our diplomas are not now under a ban of inferiority, so that the alleged reason for going to Europe to study Medicine is set aside. Federation with the old country is accomplished at least so far.

To the students now present I would offer a few words of congratulation and counsel. At the opening of the Medical School in 1863 there were three students; now there are over 200. They may congratulate themselves, therefore, upon being associated with an institution that is evidently prosperous. A further evidence of this prosperity is that, during the past year, the fees paid by medical students amounted to upwards of £4000—a sum far in excess of that received from the students of all the other departments. In addition to this sum, it is estimated that during the present year £964 will be obtained from the fees for hospital practice. In the face of these facts, it must be admitted that any parsimony of the Council in dealing with the Medical School, would be the extreme of ungraciousness.

Finally, let me express my thanks to the Faculty for having chosen me to deliver an address at this commencement of the twenty-sixth year of our academic life, and to express a hope that the vitality and vigour of the Medical School of the Melbourne University may go on increasing, year by year, until its fame is as great as that of those schools on the other side of the world, which, through centuries of thought, labour, and accumulated experience, have associated themselves with all that is good and useful in the science, which has conferred so many blessings on mankind.

Original Articles.

A CASE OF TRIPLETS.

By O. Penfold, M.R.C.S. et L.S.A.

Mrs. B., æt. 38, a native of Spring Gully, Sandhurst, mother of nine children, the last born three years ago, two miscarriages since. Was taken in labour on Friday, May 6th, 1887, women being in attendance on her. She resides in the country, about six miles from Sandhurst. About 6 p.m. the first child was born, without trouble. It was a female, and of good size. After waiting some time, the attendants, finding that the pains did not return, that the abdomen was little smaller than before, and that no placenta was expelled, sent for medical assistance.

On my arrival, just before 10 p.m., inspection showed the abdomen to be very large; percussion gave dulness all over except the left flank; palpation made out fœtal limbs, &c., and on auscultation faint fœtal heart sounds could be heard. Pains were absent, the pulse was of fair volume and of medium frequency. The os uteri was widely dilated, and by external pressure on abdomen, a bag of membranes was made to present. I gave a drachm of the liquid extract of ergot and ruptured the bag with my finger nail, causing a very large gush of liq. amnii to follow. Waited a quarter of an hour and examined again while a slight pain occurred. I was astonished to find a second bag presenting, and through its flaccid walls I could feel a rounded breech and adjacent parts of a child. I now tried to rupture this bag with my finger nail as before, but, it not being tense enough, I did not succeed. Then, using a hair-pin straightened out, I punctured the bag, and gave exit to more liq. amnii.

As there was plenty of room in the pelvis and vagina, I waited till pains came on, and, assisting by external pressure with my hands on the abdomen, the second child was born at 10.25 p.m.

After waiting a few moments, examined again and found the left knee of a third child presenting. It descended, and I drew the left leg out, and made gentle traction and brought down the other leg, the arms, and lastly, by firm traction, the head; the whole child being born at 10.37 p.m., twelve minutes after the second one. This third one was also a girl, and in a state of suspended animation, but was easily restored. After waiting twenty-five minutes, I removed the placental mass by traction and external pressure. It was a conjunction of two placentas, with two separate cord insertions, and, almost separate from this double placenta, was another one, with the third cord inserted into its centre, the whole being connected by the membranes. These latter presented the usual appearance, but in the middle, *i.e.*, between the double placenta and the single one, the membranes formed a large sac of a creamy white colour, resembling a hydatid mother-cyst in appearance.

The patient was rather weak and vomited after delivery, which was beneficial, as she probably got rid of the balance of the liq. ergotæ, which was no longer required. The uterus remained firmly contracted, and she was made comfortable and bandaged firmly.

This is the second case of triplets I have attended during a practice of 17 years, the last being on the 11th of January, 1884, when the patient, a Mrs. J., was delivered of three male children, all of whom died a few minutes afterwards from premature birth, the mother having had a severe fall which induced the premature labour.

In the present case the three children are all female and mature, and each apparently as strong as small single-birth children.

I believe the proportion of triplets to single births is about 1 to 5000, and think that the details of this particular case might prove interesting to others besides myself.

Sandhurst, May 1887.

CASE OF HYDATID CYST ERODING WALLS OF SUBCLAVIAN ARTERY.*

By W. Gardner, M.D., C.M.

Surgeon, Adelaide Hospital, and Lecturer on Surgery, Adelaide University.

E. F., æt. 16 years, first consulted my Assistant-Surgeon, Dr. Giles, at the Out-Patient's Department of the Adelaide Hospital. She complained of a swelling at the root of the neck on the left side, which was first noticed twelve months before, and which caused pain at intervals and shortness of breath. The patient had some suggestions of scrofulous taint, and the diagnosis arrived at was softening of caseous glands, and she was sent into Hospital on February 15th for operation. In this diagnosis I concurred, and on February 24th we cut down on the tumour, and after dividing the platysma and skin, and separating the tissues with the handle of the scalpel, we found that a small puncture had been made in the capsule, through which a pearly membrane protruded. It was then apparent to all present that the case was one of hydatid, so that the cyst was opened up, and the incision gave exit to a vast number of small daughter cysts, and finally, the mother cyst. No bleeding occurred except from a small vein, and this was easily controlled by sewing the sides of the cyst to the skin. The whole contents were then washed out by irrigation with warm water, and a large drainage tube inserted. On passing the finger into the cyst it could be felt to extend back as far as the spine and downwards into the chest. Everything went on well till the morning of the 8th March, when severe hæmorrhage set in, which was stopped by pressure with a strip of lint inserted into the cyst by Dr. Aitken.

On March 9th the wound was dressed at 9 a.m. No hæmorrhage. At 11 a.m. the same day hæmorrhage came on whilst Dr. Stirling was visiting the ward, and at his suggestion sponge pressure was applied. On this day I was away in the country, and my Assistant-Surgeon, Dr. Giles, acting on Dr. Stirling's advice, under ether, re-opened the wound and attempted to find the vessel, but this was finally found to be impossible owing to the welling up of the blood. The wound was then filled with sponges, and the case given up as hopeless. The patient died at 10.55 a.m. on the 10th March.

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* Read before the South Australian Branch of the British Medical Association.

Consent to make a complete examination could not be obtained, so I enlarged the wound slightly and removed the external envelope with the vessels nearest to it. There was then found to be an erosion of the subclavian artery, due to pressure from the cyst wall. As far as my acquaintance with the literature of hydatid disease goes the specimen is unique, the trunk of the subclavian being eroded so as to detach the origins of the thyroid and vertebral arteries. I need not tell you that to cope with such a condition is entirely outside of the range of practical surgery. For the careful dissection of the arteries I am indebted to Mr. Hope, one of our third year students.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, JUNE 1ST, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. Jamieson, Allen, Neild, C. S. Ryan, J. W. D. Hooper, Davenport, Barrett, A. A. Fletcher, Grant, Joyce, Courtenay, Sparrow, Peipers, Iredell, C. E. Gray, Howard, F. D. Bird, Loosli, Moore, Nickoll, J. P. Ryan, Webb, Daish, Barker, Meyer, F. J. Owen, Workman, E. M. James, Lalor, Burke, A. G. Black, Power, and Shuter.

The chair was occupied at first by Dr. JAMIESON, and subsequently by the Vice-President, Dr. J. P. RYAN.

The minutes of the preceding meeting were read and confirmed.

The HON. SECRETARY stated that he had been requested by the President, Dr. J. WILLIAMS, to apologise for his unavoidable absence through indisposition.

A copy of the Report on Small-pox on board the s.s. *Preussen* was received from the President of the Central Board of Health.

Dr. HUGO SCHIEL, M.D. Kiel, of Minyip, was unanimously elected a Member of the Society, being proposed by Dr. Peipers and seconded by Dr. Jackson.

The following paper was then read:

SACRO-ILIAC DISEASE.

By FRED. D. BIRD, M.S., M.R.C.S.E., M.B.

I have often wondered at the small interest apparently taken in the diseases of a joint, so important in the economy as the sacro-iliac synchondrosis. The impression conveyed from reading the principal authorities on the subject, is that abscess is an almost invariable concomitant of the disease, and that its chief importance is in connection with the diagnosis of hip disease. The directions given for opening, in various positions, the abscess connected with the diseased joint, are generally the principal part of the treatment laid down even in standard books on surgery. As in joint disease generally, the early recognition of inflammatory processes, and the vigorous application of suitable measures of treatment, are of the highest moment to the welfare of a patient suffering from sacro-iliac disease, the tendency of which is undoubtedly to a fatal termination when it has once entered into the suppurative stage.

The disease I believe to be a rare one, although Barwell says he has seen a goodly number of cases, and Sayre goes so far as to call it quite common. Most authors, however, agree as to the fact of its rarity, and only thirteen cases were treated in University College Hospital between 1871 and 1880. That it is a rare disease may, I think, be taken for granted, especially when we consider the passive nature of the articulation, the absence in the great majority of cases of synovial membrane worthy the name, the very limited, if indeed any movement allowable at its site, and the presence in the interior of the joint of a substance so inactive and so unimpressionable as the ear-shaped cartilaginous plate. A joint whose function in the body is one of passive weight-bearing solidity, is very much less liable to inflammation of its component parts, than one endowed with free mobility, in addition to the necessity of having to bear much of the weight of the body, as is the case in the neighbouring hip-joint. Again, there are no bursæ in connection with the synchondrosis to afford a starting point from which inflammation may proceed to it, and but little external pressure is exerted upon it in ordinary life, although from the long continuance of the recumbent posture, a bed-sore may eat its way into the articulation, and disorganise it to such an extent as to make the joint freely movable. The knowledge of the size of the joint (which is considerable, the articulating surface of the sacrum being two inches in its greatest width, and as much as two and a half inches in vertical measurement), is of the greatest utility in a proper appreciation of the disease. On account of this large size, and the absence of synovial membrane, inflammation may exist in a small portion of bone or ligament composing the articulation, and leave intact, at all events for a time, the rest of the joint. This localised form of the disease can be diagnosed when the inflamed spot exists in the posterior aspect of the joint, in which position it is readily amenable to prompt treatment.

The importance of this joint, as bearing the weight of the parts above, is well shown to us in disease. A person with incipient sacro-iliac disease may be able to stand without much pain, if allowed to choose his own position, but the addition of a weight to be carried in the arms will probably cause distress. As to the motion in this joint, although authorities differ somewhat, I think Morris is very near the truth when he says there can be no actual movement of one bone upon the other. When the joint becomes inflamed, its component parts softened and swollen, some degree of mobility is undoubtedly present, and when an advanced stage of destruction has been reached, considerable movement is possible, as I have on three occasions seen post-mortem. The recognition of this joint's dependence upon its ligaments helps us to understand those cases of sacro-iliac disease in which the ligaments are primarily affected, and in which sometimes the disease does not spread to the bones at all. It was to this form of the disease that the older writers gave the name of sacro-iliac strain. This form I think is generally due to parturition. The structure of the bone forming the joint, and adjacent thereto, is worthy of notice. Both the sacrum and the ilia contain much spongy tissue in this situation, enclosed between hard laminæ, a condition somewhat favouring inflammation, which, when once set up, would be more likely to give rise to caries than necrosis, a prognostication which is borne out by pathological facts.

In addition to the anatomical conditions, the anatomical relations of this joint are of distinct importance to the surgeon, not only in relation to treatment, but also as assistance in the elucidation of symptoms for diagnosis. The nerve supply of the joint is derived from both lumbar and sacral plexuses, as well as from the branches of the posterior sacral nerves. The diffused pain over the haunch which is generally felt, may be explained in this way, as well as the pain referred to at the back of the calf and parts supplied by the branches of the lesser sciatic nerve in a case described by Hilton. It is very probable that the obturator nerve sends filaments to the joint from the proximity of the trunk of the nerve to the front of the synchondrosis, and from the fact that pain on the inner side of the knee, similar to that felt in hip-joint disease, is occasionally the first symptom noticed in sacro-iliac disease. Again, the superior gluteal nerve coursing to its exit from the pelvis passes near the joint. On the left side the synchondrosis is in relation with the first portion of the rectum, guided by which, abscess from disease of the joint has been so directed as to eventually point in the anal region, or burst into the rectum itself. The possibility of wounding the internal iliac vessels in deep gouging in advanced cases must not be forgotten. The propinquity of the psoas generally leads to irritation of that muscle, with consequent flexion of the hip-joint, which, as a rule, is not marked.

A clear perception of the causation of this disease assists us to form a classification of the various forms in which the disease exhibits itself, as well as in the treatment. That it has several causes is very evident from the different views expressed by various authors; thus forty years ago Sir Charles Clarke described it as a disease following parturition. Hilton records cases due to injury, to parturition, and to what he terms "obscure causes." Erichsen believes the disease to be strumous in origin, partaking of the nature and ordinary character of white swellings. Sayre ascribes the disease invariably to traumatism. Arthur Barker, in the new edition of Holmes, divides the causes into two, injury and struma. Barwell says it always originates in ostitis and caries, while Warrington Haward speaks of the joint as more usually becoming implicated by the spreading of caries from the adjacent surface of the sacrum or ilium, but as occasionally following injury and parturition. Bryant mentions it as more often the result of parturition than of local injury.

As to the predisposing causes of age and sex, I have found recorded cases of all periods of life, varying from childhood to old age, and have recently seen myself what I believe to be an undoubted case in a lady over sixty; on the whole, however, the disease is perhaps more common in young adult life than at any other time. Both sexes seem to suffer, the female possibly more than the male, on account of parturition as a factor. Parturition stands out prominently among the causes of this disease, and appears to be capable of giving rise to two distinct varieties, the more usual being a ligamentous strain, the pain of which is much relieved by a strong pelvic band approximating the bones, and thus removing the tension of the ligaments; and the other, in which the bone seems to primarily inflame, leading eventually to abscess, and into this variety the ligamentous strain may of course easily pass.

Traumatism is the most obvious of all causes, and I think the most frequent among the cases I have been able to find, although Erichsen cannot trace it to a blow or injury in any of the cases he has seen. In the case I alluded to just now, I could distinctly make out a causative injury, in the shape of a blow received directly over the joint. Injury may not necessarily, however, take the form of a blow; a severe straining of the whole pelvis may be the cause of subsequent disease. As in hip disease, over fatigue may be a cause. In the case of a strong healthy young man who recently consulted me, this was the only factor in the production of this disease which I could make out after careful questioning. Several authors allude to the difficulty of arriving at the cause in some examples, and this was evidently the case in connection with a young girl suffering from early sacro-iliac mischief, who was admitted into ward 5 some years ago when I was a dresser at the Melbourne Hospital. It may be said that in these examples of undetermined causation, struma is the hidden reason; but in the case of this girl, she got perfectly well without the formation of abscess, and did not suffer much in her health, which was robust when she entered the hospital. As with hip disease and disease of so many other joints, the question of struma immediately crops up in connection with the consideration of the diseases of the sacro-iliac synchondrosis. Some cases are of undoubted strumous origin; others again appear so, but may eventuate in a cure, as in a case of Hilton's, while a fair proportion are as undoubtedly due to ordinary inflammation, following injury, in a healthy person. The subject of injury in connection with undeveloped struma is too large for me to venture into. Pelvic cellulitis may cause disintegration of the joint, as I have found post-mortem. Pyæmic inflammation has been seen, I believe, in this joint, but I can find nothing very definite recorded about it.

Sarcomatous disease may invade the joint from the ilium or the sacrum, and is principally interesting from a diagnostic point of view. After thus enumerating the causes of sacro-iliac disease, they may be compared with those of morbus coxæ, and leaving out parturition on the one hand, and synovitis on the other, they are found to be very similar. The over-fatigue, the blow, the strain, the obscurity of cause, and the possibility of struma, as an active or as a complicating cause, exist alike in the two diseases, and as these are all common events or conditions, there is considerable liability to error.

Many authors are content to write of the various forms of the disease in a mass, with no differentiation of cases whatever. Barwell divides them clinically into two classes, which are, however, pathologically the same, viz., the more serious form, which is "simply vertebral caries," "a low form of Pott's disease, in fact," which spreads to the joint from the front, and the other more amenable to treatment, which begins as ostitis of the articular facet of the sacrum, very rarely of the ilium. This is, I think, a very valuable distinction, helping us to recognise that the milder is an inflammation in a position which is not inaccessible to vigorous antiphlogistic measures, and which does not differ from an inflammation in any other part of the skeleton proportionately cancellous. I would venture to add a third division to these two, viz., that class of case in which the brunt of the injury has fallen on the ligamentous tissues, and consequently to which inflammation is at all events for a time confined. I have little doubt that such cases exist; the anatomical configuration of the joint would lead us to look for them; in addition to which, several authors describe cases especially occurring after child-birth, in which undoubted disease of the joint existed with an amelioration of pain on the application of a firm pelvic band, taking the strain off the tender fibrous structures. Heather Bigg alludes to several cases of this class, in which strong pelvic girdles have brought about a successful termination. Approximation of the ilia in cases in which the bone is considerably diseased, so far from relieving the pain in the joint, increases it to agony.

A differentiation of these cases of strain is very necessary, for as the anterior ligaments are very thin, and add very little to the strength of the joint, compared with the posterior, the latter receive the whole of the strain, which is not accounted for by the flanges of the bones, and are by their position accessible to local treatment, as well as of course general pelvic support. I believe that in delicate or scrofulous subjects, in whom treatment has not been energetically directed to the disease, the inflammation may speedily pass to the bone, where it will be more prone to spread, and more difficult to allay. Thus, the early recognition of this division is of great moment in the treatment of the disease. I would then classify diseases of the sacro-iliac joint under four heads, viz.:

1. Ostitis of the anterior portions of the coalesced bodies of the sacral vertebræ.
2. Ostitis of the articular surfaces, or adjacent portions of the sacrum and ilia.
3. Sacro-iliac strain, or ligamentous inflammation.
4. Sarcomatous disease.

It may be objected to this classification that the first division is merely sacral caries, and the last simply sarcoma of the sacrum, or less probably of the ilium; but it must be remembered that as the joint has no synovial membrane, properly so called, the principal starting point of joint inflammation is absent, and the actual articular domain must be invaded from without, if we except inflammation beginning in the ligaments. Thus, supposing we adhered strictly to a classification based upon disease commencing in the actual joint, we should reduce the subject of this paper to still smaller limits than its rarity is allowed at present, and analogously, exclude rarefying ostitis of the trochanter femoris, so likely to pass on to implication of the articular cartilage and synovial membrane, from the category of hip disease.

The symptoms of this disease vary very much in accordance with the exact situation of the inflammation, with the acuteness of the process, and with the constitutional pre-disposition of the patient. The cause also exerts great influence on the early symptoms. The beginning of the disease may be most insidious, matter having formed at the site of the joint before a surgical opinion is sought, or the inflammation may mark its onset by shivers, rise of temperature, profuse sweatings, foul tongue, and distressed look, all pointing to constitutional disturbance. Again, the course of the disease ranges between extreme chronicity and terrible acuteness. The rarity of disease is commented upon by the difference of opinion shown by various authors, on its natural history, one declaring it to be always most chronic in its nature, another asserting its symptoms to be acute. As might be pre-supposed, caries of the conjoined vertebræ of the sacrum is the most likely form to give rise to abscess before being diagnosed, but the formation of pus may take place quietly, even where the disease is situated posteriorly and superficially. The symptoms may be classed into subjective and objective; of the former, pain is the earliest, as a rule. It occurs in various positions, and may be localised or diffused; it may be sharp and lancinating, or dull and heavy; it may be constant, or present only after or during movement. Pain may sometimes be felt only on the receipt of a sudden jar. Manipulation of the pelvis does not always produce pain in the early stages. As a rule, the pain is dull and heavy in character, and diffused all over that side of the pelvis and buttock, also extending down the course of the sciatic nerve, in some cases it appears to be more localised over the region of the joint. This pain is referred in many cases to the hip-joint. The two cases who recently consulted me, both intelligent people, referred their pain to the hip. Pain has been recorded on the inner side of the knee as in morbus coxæ, and also is often caused by jarring the heel. Approximation of the ilia is a deceptive proceeding for diagnosis, in cases of ligamentous strain the pain and feeling of disruption will be relieved by it, in later cases where some disintegration has occurred, gentle support to the sides of the pelvis eases the pain, while firm pressure causes great agony. The fact of no accession of pain occurring on crowding the ossa-innominata together cannot be held as indicative of the absence of sacro-iliac mischief, for in early bone lesion of the joint, the inflammation may be too localised to be affected by such manipulation. In the same manner, pulling the ilia asunder, is also a manipulation productive of equivocal results, for a small patch of softened inflamed bone close to the cartilage may be uninfluenced by any ordinary movement of this sort. Pressure on the trochanter does not necessarily cause pain, except what is accounted for by the general tenderness. In the form of the disease in which the lateral surfaces of the bones are affected there exists, as an incipient symptom, a peculiar feeling of weakness, of insecurity, of giving way at the lower part of the back, which is very characteristic, and which progresses with the disease into a pain, which suggests the idea of falling to pieces, or being rent asunder, when the upright position is assumed, or locomotion attempted. In caries of the sacral vertebræ anteriorly, before implication of the joint, pain, simulating sciatica, may be the only symptom of the disease for a long time, until abscess shows in some position. Cases occurring after parturition are often first noticed on the patient essaying to walk, when inability to do so, owing to the acute pain, is at once felt. Increase of the superincumbent weight to be supported by the joint causes an exacerbation or an accession of pain.

Pressure downwards on the head produces a like result, though not in all incipient cases. Stooping always gives rise to pain. This seems to be a position which is sure to occasion pain, if there be disease about the joint, and when the patient is convalescent and able to perform other ordinary movements without pain, stooping, and rising from a stooping position, will remain painful actions for some considerable time. This was very well shown in both my cases. Movements of the hip joint on the diseased side produce pain, for which reason the affection is often taken for morbus coxæ, If manipulation is properly conducted by the surgeon, with the patient lying flat on a couch, ordinary movement of the hip-joint is unaccompanied by pain, but when a certain limit is reached, especially in the direction of abduction, pain begins referred to the whole side of the pelvis and hip. It is very necessary that the manipulations should be carefully made, so as to get at first movements appertaining to the hip-joint alone. Deep pressure from the front of the abdomen in the direction of the synchondrosis may occasionally produce pain and tenderness.

In a similar way, important evidence of disease may be gained by a digital examination of the rectum. Percussion over the sacrum may give rise to tenderness and pain in cases of anterior disease. The evincing of tenderness on pressure may be of great aid in arriving at a proper diagnosis, but it is worse than useless if its presence is not carefully looked for, and the possibility of the extent of tenderness being very limited, borne in mind. Vague tenderness diffused over the whole region of the haunch is usually present, and no particular spot is said to be most tender, until the surgeon happens to hit upon it, in the line of the sacro-iliac joint. Before the formation of abscess, the very tender spot is generally of small size, and if the surgeon doses not explore with care the whole extent of the joint, the spot may be easily missed and the erroneous conclusion, with its most serious consequences arrived at, that the joint is not the seat of inflammation. Thus a systematic examination over the vertical line of the joint is very necessary.

Pain in defæcation and some trouble in making water are alluded to as early symptoms by some authors, but I have not observed them. Of the objective symptoms the gait is the most obvious to the surgeon's eye. The method of progression, although characteristic of the disease when once attention is directed to the joint, is not sufficient so to lead the surgeon immediately to the seat of mischief. There will, of course, be lameness varying in degree, and the walk is not unlike that seen in the very rare unilateral congenital dislocation of the hip, although it is exaggerated by the pain induced by movement. The whole pelvis with the body above is swayed forward when the weight is on the sound leg, the ball of the foot being the centre of rotation. It is not so much a limp as an ungainly lurch of the whole side of the body. There is some lordosis, but the anterior curvature of the lumbar region is not nearly so marked as in congenital dislocation. Viewed from behind, when suspicion has been attracted to the synchondrosis—a peculiar giving-way of the region between the lower lumbar spines and the posterior spinous processes of the ilium—a subsidence of the part is noticed when the weight of the body is transferred to the affected side. This rotatory swing of the body forward in walking remains for some time after the active disease has disappeared. When the patient stands, he will naturally rest his weight on the sound limb; the other will be slightly advanced, and flexed at the hip-joint, inversion or eversion not being noticeable to any special degree. He will also bend his body laterally to the undiseased side, whether in standing or walking, though more in the latter. This lateral flexion is probably due to the desire to lessen the pain in the articulation by gentle extension, due to the weight of the limb dragging in some degree on the ilium. The moderate amount of flexion at the hip-joint will also aid this natural extension. The pelvis will be oblique, and there will be apparent lengthening of the limb on the diseased side. This lengthening is sometimes ascribed, not to the obliquity of the pelvis, but to the swelling of the joint, forcing the ilium forwards and downwards, which would add in a small degree to the actual as well as the apparent length of the limb. Shortening is mentioned as being the condition of the limb in a case of Barwell's, but it is difficult to understand, although Hilton also reports a case with apparent shortening due to tilting up of the pelvis on the diseased side. This shortening, it may be said, occurred in cases both of whom were bed-ridden, and who did not therefore curve the body to the opposite side for relief in standing and locomotion. When the case has progressed as far as the formation of abscess, due to considerable carious ulcers in the bone, locomotion may become impossible, or so painful as to be never tried. At this stage any movement of the lower portion of the body is attended with intense pain, and the sufferer is utterly helpless. A patient may, however, get about with an abscess over the joint, or in some other part, provided that the necrotic process has not implicated a large surface of the articulating bones.

Puffiness over the joint is a phenomenon present in early cases, not of necessity as a sign of abscess, but due to the swollen state of the infiltrated cartilage, and the laxity of the softened ligaments. The tumefaction will be narrow, linear, over the exact line of the joint, and not spreading much on to the surfaces of the neighbouring bones. The swelling due to abscess, which may occur in early cases, will not adhere so strictly to the verticality of the joint, and will be of more rounded outline.

Obliteration, or lowering of the fold of the nates, will depend on the length of time the disease has existed, and the acuteness of its course. It may be, but is not necessarily, present in early cases, and is not characteristic, being an outlying symptom of morbus coxæ as well.

Abscess, which is the usual result of inflammation in cases where the disease is not recognised soon and treated vigorously, may form at an early period of the case, or may be deferred for months, or even years. The tendency is undoubtedly towards the formation of matter, which marks the point in the history at which treatment becomes of far less utility, and whence the case is apt to lapse into hopeless exhaustion of the vital powers. Even when abscess has formed, although the outlook for the patient is generally very dark, recovery with some awkwardness of gait may take place. The swelling due to matter situated over the back of the joint is sometimes the first objective symptom noticed. The collection varies much in size as in position; it may be a small fluctuating tumour over the posterior surface of the articulation, or the whole buttock may be the seat of suppuration. The position depends upon the seat of the inflammation. Thus, anterior sacral caries low down will lead to an abscess bursting into the rectum, or pointing at any part round the anus. Ostitis higher up will produce matter eventually tending to open in the hollow behind the trochanter, being conducted thither by the pyriformis muscle. On the anterior surface of the joint matter may form, which will simulate the appearance of iliac or psoas abscess; and of course abscess posteriorly, the most common place for it, will show over the region of the posterior spines of the ilium. The contained pus may be laudable, or curdy and flocculent, or thin with bone debris in it, and, very occasionally, the abscess has been remarked to be tympanitic. Abscess may point or burst in more than one position. The mode of appearance of these abscesses is generally quiet and unobtrusive; it may, however, be violent. With the continuance of abscess come the liability to pyæmic and septicæmic invasions, and the probability of lardaceous changes in the viscera.

The diagnosis of this disease is generally arrived at by a process of exclusion. There are, as we have seen, definite symptoms of the disease, but these are not always present at the same time, or in regular sequence, so that, although the surgeon's suspicions may be aroused as to the state of the joint, or of the bones in its immediate neighbourhood, he will confirm his suspicions by eliminating diseases having somewhat similar features. The question may be asked, when may inflammation in this region be specified by the name of sacro-iliac disease? Ostitis of the trochanter is by no means an uncommon form of commencing hip disease, and produces symptoms which are called those of hip disease, although the trochanter is some distance from the actual articular boundary. A patch of ostitis on the sacrum may be but an isolated inflammation, but it may easily spread into the actual joint surface of the bone. It would be safer, I think, to allow the name of incipient sacro-iliac disease to the small patch of sacral ostitis, whose potentiality for mischief is so great, than to wait until the joint has actually become implicated in its internal aspect, before giving the disease the name, which carries so much more of meaning and of weight to the surgeon's mind than the term ostitis.

When the mischief begins on the auricular surface, generally of the sacrum, the diagnosis may be arrived at by noticing more particularly, amongst other symptoms, the peculiar gait, the excessively tender spot in the line of the joint, and the circumscribed puffiness over the joint. In an incipient case, the symptoms are such, and the patient's feelings such, that attention is first of all paid to the hip-joint. There are so many of the less important symptoms common to the two diseases, that the surgeon's mind is apt to become wedded to the idea of hip-disease, thus the history of the causation, the general pain, the pain apparently, though not really caused by motion at the hip, and on jarring the heel, the lowering or obliteration of the fold of the nates, and the slightly flexed state of the hip, with possible eversion, all look like early hip disease. Even when recourse is had to manipulation, the error may be persevered in, if excessive care in handling be not used.

It is well, therefore, in a doubtful case of joint disease, in the neighbourhood of the pelvis, to use pressure on the two accessible parts of the hip-joint, in front and behind, in quest of pain due to synovial inflammation, and then to examine the size of the trochanter for rarefying ostitis. If nothing accrues from these methods, morbus coxæ may, with considerable certainty, be excluded from the diagnosis. The negative aspect of several of the symptoms is also of manifest importance. No pain on approximating the ilia, or pulling them outwards, does not necessarily imply no disease, and no special tenderness of the joint aspect posteriorly, does not of necessity absolve the joint of inflammation, for this inflammation may be very localised, and easily overlooked.

The differential diagnosis of sciatica may be difficult in cases of anterior sacral caries, but not in other forms of the complaint. Disease of the lower lumbar vertebræ is not to be diagnosed from the form just mentioned until abscess has appeared, and possibly not then, or until some deformity shows itself in the spine. A bruise over the joint in a hysterical girl may give rise to symptoms which will look like the incipience of sacro-iliac disease, but in this and neuralgiæ of hysterical origin careful consideration of the physical appearances will usually lead to a proper diagnosis.

The treatment of this disease naturally falls into two categories —that required when abscess has formed, and that directed to prevent the inflammatory process resulting in suppuration. The former has been treated of in various books, and is mainly a record of the most suitable places and methods of opening the abscesses found in various positions. Also the application of more determined surgical measures to rid the patient of the carious ulcer in the bone, which is causing all the trouble. This has been accomplished with very good results by means of gouges, trephines, spoons, &c. The value of rest and pelvic bands is also insisted upon.

It is particularly with regard to treatment in the early stages, before the formation of abscess, that I wish to give my small experiences. Without rest, of course, no good can be obtained with any other measures of treatment. Rest should be maintained in recumbency in the posture, which is easiest for the patient. There is no occasion, I believe, to insist on the prone position, as has been done by some authors. After rest, I would place in importance local depletion by means of leeches, varying in number from eighteen to three or four, according to the strength and age of the patient. They should be applied over the line of the joint, and their application should be renewed if required. I have been in the habit of administering grey powder in small doses in early hip disease, and I have continued the practice in these cases of sacro-iliac disease with, I believe, beneficial effects. After the leeching, which relieves the pain and distress very much, a blister may be applied round the area of the joint, or recourse may be had to the severer form of counter-irritation in the production of eschars of some depth with the thermo, or actual cautery. By these means, I have no doubt in my own mind that I have been able to cure two cases of this disease. Some months have now elapsed since the beginning of the inflammation in either case, and both patients are able to get about, much the same as before their illness, though there is possibly some slight difference of gait in one of them.

Mr. E. M. **James** said that the Society was much indebted to Dr. F. D. Bird for this paper, in which he had gathered from many sources the substance of what was known concerning a rare disease. Mr. James referred to five cases which he had met, three in hospital practice and two in private. Two followed parturition. One of these ran a very chronic course, and, notwithstanding careful treatment from the outset, it ended fatally through exhaustion from profuse discharge. A second was a case of acute suppuration, and death soon ensued. The other three cases occurred in children, and followed injury. In children there is sometimes great difficulty in distinguishing between disease in the hip-joint, in the bursa over the great trochanter, and in the sacro-iliac articulation.

Dr. **Webb** was rather surprised at the number of cases seen by Dr. F. D. Bird. He had himself met sacro-iliac disease in three patients after parturition, but never as a result of tuberculosis. Pain on extreme abduction or flexion was often seen, but was not a sufficient sign of sacro-iliac mischief. Sacro-iliac disease was always fatal when it progressed to suppuration. In Guy's Hospital, eleven cases occurred during ten years, and only one was supposed to recover. Dr. Webb gave particulars of cases under his own notice, laying great stress on the necessity of keeping patients in such position that gravitation would constantly assist drainage, and of opening multiple spinal and other abscesses far away from their original site, so as to obtain a free opening and facilities for aseptic dressing.

Professor Allen congratulated Dr. Fred. Bird on his paper, and referred to cases of destruction of the sacro-iliac articulation which he had met in the post-mortem room in connexion with pyæmia, psoas abscess, and acute bedsore. Dr. Allen also commented on the stability of this joint, as instanced by a case of extensive sacral caries which did not involve it, and by a case in which the pubic and sacro-iliac synchondroses were torn, and remained loose without any consequent inflammation. He also referred to a case of sarcoma of the sacrum which spread rapidly through these joints to both ilia; and also to the deformities produced by osteo-arthritis.

Dr. J. P. Ryan said that thanks were due to Dr. F. D. Bird for an interesting paper on a subject which did not come under the notice of many surgeons. He instanced a case recently under his own care, in which there was localised pain over the sacro-iliac joint, with extreme tenderness and other symptoms, but without any signs of hip-disease or sciatica. Recovery was gradual, and he believed that it was a case of sacro-iliac mischief.

Dr. F. D. Bird, in reply, thanked Mr. James for his kind remarks. He had not seen a clear case of suppuration from sacro-iliac disease. His attention was first arrested by the case of a medical student, who seemed to him to be in the early stage of sacro-iliac trouble. Mr. FitzGerald, who was consulted, arrived at the same conclusion. After four or five months, recovery ensued. He had seen one other case in private practice, which also recovered; and he remembered a third which he saw when a student in the Melbourne Hospital. Hilton and Barwell had both recorded cases of recovery after suppuration. Dr. Webb was in error in supposing that he diagnosed sacro-iliac disease simply by pain in extreme abduction; this was only one element in a case, and was not to be taken alone. The fact that recovery rarely occurs when once the stage of suppuration is reached, had prompted him to draw attention to the diagnosis of the disease in its early stages, when treatment may be expected to end in good results. Since this paper was written, he had been called to see a case apparently of ostitis of the sacrum, not affecting the articulations. With rest, grey powder, and the thermo-cautery, the patient was getting better; but the case was one which, if neglected, would readily have passed into sacro-iliac disease. Dr. F. D. Bird concluded by thanking the members for their kind attention and criticism.

EXHIBITS.

Dr. C. S. **RYAN** exhibited a child whose hip he had successfully excised.

Dr. J. W. **BARRETT** exhibited the electric-light ophthalmoscope.

Professor **ALLEN** also exhibited several pathological specimens.

A Special Meeting was then held to consider proposed amendments in the Rules of the Society.

On the motion of Dr. **NEILD**, seconded by Dr. **NICKOLL**, it was resolved that the third clause of Rule XI. be rescinded, so far as the word "fourteen" is concerned, and that the word "eight" be inserted in its place.

On the motion of Professor **ALLEN**, seconded by Mr. E. M. **JAMES**, the following New Rule (VIIA.) was adopted:—"Any Member residing more than ten miles from Melbourne, who shall present £10 to the Society in one sum, or who shall surrender Debentures to the same amount in value, shall be a Country Life Member of the Society; provided that £5 or one Debenture shall be accepted instead of £10 from those who have been members during five years. If a Country Life Member shall subsequently reside within ten miles of Melbourne, he shall either resume his ordinary Membership, or on presenting an additional £15 to the Society, or on surrendering Debentures to the same amount in value, shall be a Life Member of the Society."

The meeting then terminated.

SPECIAL MEETING, WEDNESDAY, JUNE 8TH, 1887.

On the motion of the President, Dr. J. **WILLIAMS**, seconded by the Vice-President, Dr. J. P. **RYAN**, it was unanimously resolved that the following Address be forwarded to His Excellency the Governor for transmission to Her Majesty the Queen:—

"*To the Queen's Most Excellent Majesty,*

"*May it please Your Majesty,*

"We, your Majesty's loyal subjects, the members of the Medical Society of Victoria, in this the Jubilee year of Your

Majesty's reign, humbly offer to Your Majesty our dutiful submission.

"We humbly state that our Society was founded in the year 1855, one year before this Colony, which is privileged to bear Your Majesty's name, received its present Constitution. The Society has existed continuously since its formation, and has always included the representative members of the medical profession in the Colony. Its organ, *The Australian Medical Journal*, has been published without cessation for thirty-one years.

"We rejoice in contemplating the great expansion of the Colonies of Great Britain during Your Majesty's beneficent reign. We review the development of sanitary science and of the healing art during the past fifty years, and recognise with profound thankfulness the fostering protection and patronage which Your Majesty and the late illustrious Prince Consort ever vouchsafed to all movements tending to promote the well-being of Your Majesty's subjects. We pray that Your Majesty may live long to reign over a united, prosperous, and ever-growing Empire.

"Signed on behalf of the Medical Society of Victoria, by Your Majesty's loyal subjects."

British Medical Association.

VICTORIAN BRANCH.

Ordinary Monthly Meeting.

Wednesday, 25th May, 1887.

(Hall of the Royal Society, 8 p.m.)

Present: Dr. Simmonds in the chair; Drs. Whitcombe, Neild, Syme, O'Brien, Fishbourne, Black, Flett, Joyce, Henry, Rudall, and Springthorpe. Dr. Inglis, of Kew, was present as a visitor.

The minutes of the previous meeting were read and confirmed.

The election was announced of Dr. Hooper and Dr. Barr.

The following paper was then read:

ON THE SURGICAL USE OF PERCHLORIDE OF MERCURY AS AN ANTISEPTIC.

By James T. Rudall, F.R.C.S.

Surgeon to the Alfred Hospital, &c.

Perchloride of mercury, commonly known by the name of corrosive sublimate, having within the past few years been proved by numerous experiments to be the most powerful antiseptic known, I resolved to make trial of it in my own practice, in the hope of avoiding some of the dangers and inconveniences of carbolic acid, and I began its use specially as an antiseptic about three years ago. My first object was to obtain a solution which, though thoroughly efficient, should be attended with the minimum risk of proving poisonous to the patient. From all I could gather, it appeared that an aqueous solution of the strength 1 to 5000, would be a reliable antiseptic in most of the requirements of surgery, while allowing for some dilution by the fluids of the part operated on, and would probably give rise to little or no danger of mercurial poisoning, even in operations where washing out the peritoneal cavity becomes necessary, due caution being of course observed. Such very dilute solutions of most salts being liable to undergo chemical change under the influence of heat, light, &c., it seemed desirable to add to the sublimate solution another salt, possessing some chemical affinities which might have the effect of rendering the mercuric perchloride more stable. Those first thought of were the chloride of sodium and the chloride of ammonium. There was also another reason for an addition to the mercuric solution, viz., to increase the specific gravity of the fluid, in order to lessen the too active dialysis into the living tissues, and thus still further diminish the risk of mercurial poisoning. Sodium chloride, itself an important constituent of the blood, was employed, and in the proportion of 0·6 per cent. I made a tolerably extensive use of this antiseptic solution in a number of operations, most of them indeed of a minor character, yet also including some capital amputations, several operations for strangulated hernia, removal of tumours, and nerve-stretching. In many of these operations rapid primary union was obtained, and I found reason to believe that the antiseptic was as potent and safe as any that I had employed before. It was far less disagreeable to use than carbolic acid, and although no opportunity has so far offered for observing its effects in laparotomy, or operations extensively exposing the peritoneal cavity, I have great hope that in such cases also, it will be found less dangerous than carbolic acid. It must not be supposed that I would always entirely rely upon this sublimate and salt solution, *pur et simple*, for the dressing of operation wounds; on the contrary, iodoform in coarse powder, and generally deodorised with eucalyptus oil, iodoformed gauze, and salicylic wool are often made use of.

Terebene, diluted with oil, is also of service in some instances. As there is really no object in employing the sublimate and salt solution with scrupulous exactitude in the proportions above indicated, viz., sublimate, 0·02; sodium chloride, 0·6; distilled water, 100, I had some little packets made up by the druggist, each consisting of perchloride of mercury, gr. iv.; sodium chloride, ℥ij.; to be folded with an outside cover of waxed paper or gutta-percha tissue. For use, the contents of one of the packets is to be dissolved in a quart of water. Knives and forceps may be dipped in this solution without injury, but if allowed to remain in it, they become acted on and discoloured. In most cases this is not of much importance. For operations on the eye, when using sublimate, a solution of only half the strength above given, has been employed, that is to say, 1 part in 10,000. In practice, the convenience of these little packets is soon observed; when going to perform an operation, three or four of them are put into the instrument bag, and the solution is prepared at the bed-side of the patient. Ordinary Yan Yean water answers perfectly well. The chloride of sodium must be dry and tolerably pure, and then the packets in water-proof covers will keep well for many months.

The *Central-blatt für Chirurgie*, No. 7, 1887, which reached me only a week or two ago, contains an article by Professor Angerer, of Munich, who has been making some investigations on sublimate as an antiseptic in surgery. He states, that in all cases where distilled water is not employed, after some time an insoluble mercurial compound precipitates, which, according to the researches of Fürbringer, is a trioxychloride, or even a dioxychloride, or a tetraoxychloride, and is caused by the carbonates of the alkaline earths of the water. At the Polyclinic (Munich), a solution of 1 in 1000, prepared with the town water, is used as an antiseptic. The apothecary, Schillinger, examined the precipitate, and had previously arrived at nearly the same conclusion as Fürbringer. With the Munich water the precipitate amounted to nearly 50 % (of the sublimate.) The harder the water, the more the precipitate of sublimate. Schillinger found that the addition of chloride of sodium to the sublimate gave permanently clear solutions, and it then became a question whether, by the addition of salt, another mercurial combination occurred, whose antiseptic power might be essentially less. Dr. Emmerich (assistant at the Hygienic Institution there) made experiments comparing sublimate and sublimate-salt solution 1 to

50,000. Sterilised silk threads were impregnated with a potatoe culture of anthrax bacillus, with free spores and spore-containing bacilli, and were dried at 35° cent. Some of the threads were then placed for ten minutes in a sublimate solution, 1 to 50,000, and some in a sublimate-salt solution, 1 to 50,000. The silk threads were then rinsed with alcohol and sterilised water, and each portion was put into five specimens of sterilised agar-agar. In none of these agar-agar specimens, which were kept for six days in a warm closet at 36° cent, did any development of anthrax bacillus occur. When the threads remained only five minutes in the antiseptic solutions, with the sublimate solution, a development of anthrax bacilli occurred in four; and with the sublimate-salt solution, in three, out of five experiments. These experiments by Emmerich conclusively prove that the sublimate-salt solution is quite as active as a sublimate solution of the same strength. Angerer has had the sublimate and salt made into pastilles, which appear to be in no way more convenient than my powder packets, and he mentions among their advantages, both in civil and military practice, the ready measurement, the ease of carrying any number, the quick solubility, the capability of being used with any fairly pure water, and the cheapness. Angerer thus confirms what I have before said in favour of the use of sublimate and salt.

My short paper would have been concluded at this point, but since all the preceding was written, reports of two cases of sublimate poisoning have come under my notice. These cases are reported by Dr. Kümmell in the *Deutsche Med. Wochenschrift*, 1886, No. 34. As there is no possibility of referring to this journal in Melbourne, I have to rely on the abstract given in the *Central-blatt für Chirurgie*, No. 11, 1887. Kümmell observed two cases of sublimate poisoning in 900 operations. One was a supra-vaginal removal of the uterus, fatal on the fourth day, not from sepsis, but from pronounced sublimate poisoning; the strength was 1 to 6000. There were vomiting, bloody stools, and slight swelling of the gums, with increasing collapse. On section, the peritoneum was smooth and uninjected, and the stump of the uterus was in normal course of healing. In the ascending colon were numerous patches of loss of mucous membrane, with sharply marked edges, and between them streaks and patches of ecchymosis. The second case, papilloma of ovary adherent to the processus vermiformis, and attended with copious dropsical effusion, ended in recovery, in spite of severe symptoms of poisoning. In this case also there were evacuations of bloody stools, and the symptoms of collapse were prominent. The stimulants employed being useless, Kümmell tried an infusion of 1500 g. of a 0·6 % salt solution.* The effect of it on the heart was prompt and enduring. Seven months after the operation no relapse had occurred.

Mr. **Syme** supported the use of perchloride, so far the best antiseptic, being reliable, portable, and convenient. It had successfully passed through an extensive trial—Lister had adopted it. At the London Hospital it was used 1 per 1000. The main point, however, was scrupulous cleanliness, pathogenic organisms being more in the nails, hands, &c., than the air. At the Samaritan, boiled water, with dry dressings, with perfect cleanliness, produced the best results.

Dr. **Springthorpe** thanked Mr. Rudall for the addition of recent German results to those already found in English papers.

Dr. **Neild** asked if it could be safely recommended for the wider field of ordinary antiseptics.

Dr. **Black** had found it exceedingly useful in midwifery practice.

Dr. **Flett** corroborated. Following Ziegler, Chiene had introduced it into the Edinburgh Royal Infirmary in 1884. Ever since it had been used in the surgical wards, he remembered only one (non-fatal) case of poisoning from washing an empyæma with a 1 in 2000 solution of the perchloride.

Mr. **Rudall**, in reply, agreed that absolute cleanliness, if attainable, would perhaps be all that is necessary, but often assistance was needed, and for antiseptic purposes the perchloride was the best. In the solution the salt in some way seemed to fix the perchloride and yet to increase the germicide power. In washing out the chest, salicylic acid or boric acid were perhaps preferable.

The following paper was then read :

THE LUNACY STATUTE.

By Dr. **Fishbourne.**

Some years ago the action of this Association, in the matter of the overcrowding of our asylums for the insane, had a beneficial effect in drawing marked attention to the subject. I wish now to bring under your notice a few matters that are of great urgency connected with the treatment of a rather large class of the insane population, I mean those without friends to look after them. And as I understand that it is the intention of the present ministry to bring in a new Lunacy Bill, I think this an opportune time to lay the matter before you, hoping that discussion may be provoked and some action decided on, to put an end to the present very undesirable, and even in some instances, cruel treatment of these cases.

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* "Eine infusion von 1500 g. einer 0·6 % igen Kochsalzlösung." (Query, intra-venous injection? Anglice, transfusion.)

It is an unfortunate circumstance that the general public should have the impression that a number of sane individuals are kept incarcerated in our asylums against their will, and I fear that this impression is shared by some members of the late Royal Commission on Lunatic Asylums. The result, however, of my experience is, that there is very little danger to the public from this source. A far more serious danger, in my opinion, is the difficulty that is experienced in obtaining admission for the insane into our asylums while they are in the early, and therefore curable stage of their malady. In the case of the friendless insane the method adopted is so unjust, and so totally contrary to what was intended by the framers of the Lunacy Statute, that I ask for the weight of your influence as a body, to put an end to the existing practice of dealing with cases of the kind. The process allowed by our Lunacy Statute, if intelligently carried out, is very good. "Every constable who shall have knowledge that any person wandering at large is deemed to be a lunatic shall immediately apprehend and take, or cause such person to be apprehended and taken, before a Justice," &c. It shall then be lawful for the Justice, on making enquiry into the matter, to cause the lunatic to be brought before two Justices, or one Police Magistrate, who, having called in the assistance of two medical men, and being satisfied of his insanity, shall direct such person to be received into an asylum, and the constable shall forthwith convey him to the asylum or hospital. Apparently however, in order to save themselves trouble (I can see no other reason for it, but I may be mistaken), it is found in practice by the police, that those conveniently elastic offences, "insulting behaviour" or "vagrancy" will meet all cases.

A person, *e.g.* wandering at large, "deemed to be a lunatic," is arrested for insulting behaviour, taken to the lock-up for the night, and next morning is brought up with other criminals to be dealt with. His insanity being manifest, he is not usually sentenced, but remanded to gaol for a week. In the *Medical Journal*, Dr. Black is reported to have said at our last meeting, that there are generally five or six cases "under care" in gaol. Now by what authority, I would like to know, are recognised lunatics allowed to be kept in gaol "under care?" I agree with Dr. Black that persons suffering from *delirium tremens* deserve punishment, but to find that there are always a number of insane patients confined in gaol, compelled to associate with drunkards and criminals, and to be even under the care and control of criminals (for I observe that all the work of the gaols is done by these persons) is surely not right. I submit that such a state of things should not be allowed to exist in Melbourne for one moment. Suffering from the saddest of all diseases—a disease, frequently one of debility, requiring gentle nursing and most generous diet—the unfortunate lunatic, whose only crime is that he has no friends, is compelled to mix with criminals, to be subjected to prison discipline and prison fare. Medicines he may be ordered for his malady, but of the treatment requisite for his illness there is, and can be none. A remand is sometimes granted from week to week, until the disease has progressed so far that the patient is at length sent to an asylum to swell the list of the incurable insane.

In the present Lunacy Statute provision is made to send persons in gaol who are insane, to an asylum, under warrant from the Chief Secretary. Why this is not acted on by the prison authorities, if only for the sake of prison discipline, I am at a loss to understand. Under no circumstances, I maintain, should a suspected lunatic be sent to *gaol* for treatment or observation, but to *some hospital*, provided for the purpose.

You are, no doubt, aware that in certain of the large up-country hospitals lunacy wards have been allowed, to which magistrates have the power of sending lunatics, for the period of one month, on the ordinary certificates. My experience of these wards is, that in them much valuable time is lost, and that it is to the interest and for the welfare of the insane, that they should not be allowed to receive a patient for such a lengthened period. Patients have so often complained to me that the warders are afraid of them, that they lock them into their rooms all day alone, that they have no company or society—nothing in fact but their own thoughts, that I am constrained to believe them. Indeed one hospital surgeon has informed me that nurses are afraid of these cases, and that they are always a source of annoyance. At the same time, I think that all up-country hospitals receiving aid from the State, should provide accommodation for such cases of insanity as may arise in their neighbourhood, instead of compelling the police to use the lock-up for their detention and safe-keeping.

A short time since it was stated in the papers, that a lunatic being brought from Omeo to Kew Asylum, and having to pass the night in Sale, was placed in the lock-up, as is usual in such cases. During the night the man died. A post-mortem examination revealed that it was typhoid fever from which he suffered. What a luxury a clean bed and a drink of cold milk in the adjoining hospital would have been to this poor "lunatic!" Perhaps his life might have been saved had he been subjected to hospital treatment. A small room should be provided in each hospital for the detention of cases during the time occupied preparing for their transfer to the asylum—a place where they would be treated as invalids, not as criminals. A prison, or a lock-up, should only be used in a case of most urgent necessity. Never should a lunatic be detained in gaol after his insanity is manifest to the officials, and if insanity is even suspected, the services of an expert should be procured, so that no time may be lost in having him placed under proper medical care.

I would urge that action be taken by this Society on behalf of the insane who may have no friends in this country, to prevent the indignity, not to say cruelty, of sending them to a common gaol, where the early, and possibly the curable stage of their malady, is allowed to pass, without proper effort being made for their restoration to health.

Dr. Neild condemned the practice referred to as inhuman and unscientific. Experts should be called in at once, and protected in their opinion by satisfactory safeguards.

Dr. O'Brien endorsed the condemnation. Early treatment was essential; for it, an asylum was better than a gaol. A week's remand would be, in many cases, a serious matter. From the asylum also they might be discharged in a week if found sane. For many reasons a reception house was very desirable.

Dr. Black wanted to correct several slight errors. No blame attached to the police or the justices. They did the best possible under the circumstances. To arrest a man for lunacy would be illegal. They could not send a patient to the asylum at once, because the Chief Secretary's warrant applied only to prisoners on a charge, not persons wandering about and arrested for vagrancy, &c. In the gaol hospital they were treated as special cases. He agreed, however, that a reception house would be preferable.

Dr. Fishbourne, in reply, maintained his position. Even a reception house, to be efficient, must contain the latest appliances, and be under a first-rate man. All cases should be sent to it, and from it either discharged, or sent to an asylum. He did not blame the police, so much as the custom of treating lunatics as criminals, instead of invalids.

Dr. Neild then moved the following resolution:—"That this Association recommend to the Government the great desirability of amending the Lunacy Statute, so far as to put an end to the inhuman and unscientific procedure of dealing with alleged lunatics as if they were criminals, and the necessity of making provision for dealing with them promptly, so as to avoid the practice of sending them to gaol, instead of to an asylum, where they could be put under appropriate treatment."

Dr. Henry seconded. The Branch would still continue its efforts for the "emancipation of the lunatic." The taint attaching to lunacy would be removed by the establishment of a receiving house.

The resolution was carried unanimously.

A paper was then read "On some cases of Brain Localisation," by J. W. Springthorpe, M.A., M.D., M.R.C.P. Ten cases were cited of lesions in different parts of the cortex and capsules, full reports of which are held over for the Adelaide Medical Congress. One patient was exhibited, showing paralysis of both legs from an injury to the cortex, in the midline, near the junction of the fissures of rotando and the longitudinal sinus.

Owing to the late hour, other exhibits were held over till next meeting.

Dr. T. B. Ryan has resigned his position as Junior Deputy Medica Superintendent at the Yarra Bend Lunatic Asylum.

The tents at the Alfred Hospital for typhoid cases have been removed, and the Central Board resolved that the special services of Dr. Joske, the resident physician of the Hospital, should be brought under the notice of the Government, with the view of presenting him with an honorarium, as a mark of appreciation of his zeal and ability.

Hospital Reports.

ALFRED HOSPITAL.

Notes of Cases of Hæmorrhage in Typhoid Fever.

By A. S. Joske, M.B., Ch. B.

Resident Physician.

During the present epidemic, hæmorrhage has been a frequent complication of typhoid fever in the cases admitted to the Alfred Hospital. Thirty such cases have occurred up till the end of April, and only six of them have resulted fatally. During the same period 266 cases of fever were admitted; hæmorrhage occurring, therefore, in about 11½ per cent. of the whole. In nearly all the cases that have had it, the patients have shown a marked improvement; the tongue would become moister, the delirium decrease, and the abdominal pain and distension diminish.

The results obtained show that it is not nearly so fatal a complication as it is said to be, and there is no actual necessity, unless it be excessive, to try and stop it immediately with great doses of styptics.

The treatment adopted has been as follows: an icebag locally applied, and brandy in small doses if much shock. The drugs used were turpentine and ergot in 20 or 30 drop doses, with 2 or 3 drops of liquor opii. sed.; these being given with greater or less frequency, as the case demanded.

I.—A. C., æt. 26, was admitted on December 20th, 1886. Passed blood first on the 25th day, about four ounces. Passed a similar amount on the 27th and 28th days. Had bad pneumonia, and was in a comatose state for three days. Was discharged on February 18th, 1887.

II.—F. B., admitted on December 12th, 1886. Passed blood once on the 30th day, about four ounces. Convalescence was delayed. Patient passed a quantity of pus on the 80th day, but improved afterwards, and recovered completely.

III.—H. P., æt. 25, admitted on January 4th, 1887. Passed blood first on the 27th day and on the 28th day. Had bad bronchitis, and was very delirious. Was discharged on February 5, but re-admitted, as he had a slight rise in temperature, which had been normal for 32 days. Was re-discharged on March 29. Had a well-marked crop of spots after second admission, and continued fever for 12 days after second admission.

IV.—W. H., admitted on January 9th, 1887. Passed blood on the 19th day, about six ounces. This patient had retentio urinæ for three days when first admitted. Was discharged on March 9. Discharge delayed owing to a relapse of continued fever for 12 days, after being normal for 17 days.

V.—D. E., æt. 21, admitted on January 26th, 1887. Passed blood first on the 10th day. Passed quite a pint of blood on first occasion, lying in a pool of blood; and on the second occasion, on the 19th day, about four ounces. This patient had a previous history of rheumatism, and had had acute peritonitis three years prior to admission. He had a great deal of pain and abdominal tenderness prior to the bleeding, which relieved him wonderfully. He was discharged on March 8th.

VI.—J. B., æt. 24, was admitted on January 11th, 1887. Passed blood twice on the 17th day, and once on the 18th day. Had a great deal of vomiting prior to the bleeding, but this ceased after it. Was discharged on the 18th of February.

VII.—T. W., æt. 23, was admitted on November 11th, 1886. Passed blood on the 19th day, about four ounces. Was very delirious previous to hæmorrhage, and developed pneumonia after it. Was discharged on the 5th of January.

VII.—J. M., æt. 20, was admitted on December 1st, 1886. Passed blood first on the 24th day, and on the 25th and 27th days, about half a pint altogether. Three days after the last attack, patient eat some pears and biscuits, and died on the 5th day. Post-mortem examination showed extensive and deep ulceration above and below the ileo-cæcal valve.

IX.—H. E., æt. 19, was admitted on February 24th, 1887. Passed blood first on the 21st day, at least twenty ounces; lay in quite a pool of blood; had had profuse diarrhœa before, was followed afterwards by an extensive eruption of ecthyma all over body; had diarrhœa also after bleeding, but passed no more blood. Was discharged on April 28th.

X.—F. S., æt. 36, was admitted on February 25th, 1887. Passed blood first on the 11th day. Passed blood four times in 24 hours, about three ounces each time. Was in a heavy comatose state for some days; had diarrhœa and a bed-sore. Was discharged on April 5th.

XI.—A. H., æt. 24, was admitted on 14th of March, 1887. Passed blood on the 28th day, about two ounces, and then three ounces. Had a good deal of diarrhœa before the bleeding. Recovered completely.

XII.—E. M., æt. 26, was admitted on January 25th, 1887. Had been eating green fruit—plums, previous to admission; became very delirious and noisy. Passed blood first on the 25th day. Passed a huge quantity of blood, lying in pools of it. Mackintosh and bedding being soaked. No styptics had any effect, and he died on the 28th day. Post-mortem examination showed the intestines to be greatly distended with blood, and the whole of the large intestine showed traces of ulceration.

XIII.—J. C., æt. 12, was admitted on February 12th, 1887. Passed blood on the 13th day, first about four ounces, and then on 16th day, when he passed it four times. Had diarrhœa previous to bleeding. Was discharged on March 22nd.

XIV.—A. R., æt. 23, was admitted on January 12th, 1887. Passed blood first on the 20th day, and passed it three times more on the 23rd day. Was very delirious prior to bleeding. Was discharged on February 24th.

XV.—F. E., æt. 27, was admitted on January 31st, 1887. Passed blood first on the 18th day. Was discharged on the 8th March.

XVI.—D. H., æt. 45, was admitted on February 3rd, 1887. Passed blood on the 27th day, about one ounce. Had been in bed 20 days prior to admission. Was discharged on February 24th.

XVII.—G. W., æt. 18, was admitted on March 12th. Passed blood first on the 11th day and on the 12th day, about three ounces each time, and on the 23rd day one ounce mixed with motion. Recovered completely.

XVIII.—J. G., æt. 36, was admitted on February 18th, 1887. Had been walking about up to day of admission. Bled on the 16th day, about four ounces. Had great tympanites and retentio urinæ. He sank and died on February 29th. No post-mortem examination was permitted.

XIX.—L. C., æt. 24, was admitted March 10th, 1887. He had been working up till the day of admission. He bled first on the 18th day, ten ounces; on the 20th day, five ounces; on the 24th day, two ounces. He had retentio urinæ. He was almost comatose, and developed peritonitis, dying on March 22nd. No post-mortem examination was permitted.

XX.—F. M., æt. 21, was admitted on February 24th, 1887. He had great epistaxis, tympanites, low muttering delirium.

Bled first on the 9th day, twice, at least ten ounces on both occasions. Bed soaked in blood. Passed another sixteen ounces of blood at least on the tenth day, lying in a pool of blood and fæces. He had a rapid convalescence, and was discharged on April 5th, 1887.

XXI.—E. T., æt. 22, was admitted on February 25th, 1887. Passed blood first on 11th day, about four ounces; then on the 21st day, about 14 ounces, lying quite in a pool of blood; then on the 25th and 26th days, both times a quantity; then on the 28th, 29th and 30th days. She became very low, and developed a bed sore, but rallied and recovered completely.

XXII.—J. M., æt. 19, was admitted on February 14th, 1887. Passed blood first on the 23rd day, about five ounces, and on the 26th day, about three ounces. Bowels were relaxed during entire illness, and he had occasionally retentio urinæ. Was discharged on April 25th.

XXIII.—G. R., æt. 32, was admitted on March 26th, 1887. Had been a heavy drinker. Was in a state of low muttering delirium. Passed about ten ounces on the 19th day. Did not pass more, and progressed favourably.

XXIV.—R. M., æt. 32, was admitted on March 17th, 1887. Has been a heavy drinker. Passed blood first on the 18th day, about two ounces, and about four ounces on the 19th day. Was in a state of low muttering delirium, but recovered completely.

XXV.—J. O., æt. 23., was admitted on March 3rd, 1887. Passed blood first on the 22nd day, about four ounces, and 23rd day about six ounces. Was discharged on May 5th.

XXVI.—C. C., æt. 27, was admitted on February 18th, 1887. Passed blood first on the 12th day, about four ounces; on the 13th day passed at least ten ounces; on the 14th day he passed another ten ounces. Had diarrhœa on the 15th day, and passed a small quantity of blood twice. He passed blood again on the 17th day, about four ounces. He remained in a state of stupor for some days, but his temperature fell, and he was well for six days, with temperature normal in the morning. It then rose again, and patient developed peritonitis, dying on March 25th. Post-mortem examination showed extensive ulceration and perforation, with hole the size of a pea about three inches above the ileo-cæcal valve.

XXVII.—T. W. S., aged 11, was admitted on March 28th. Passed blood on the 23rd day of illness, and on the two subsequent days, about fourteen ounces altogether. Discharged cured. Had diarrhœa persistently.

XXVIII.—C. H., aged 17, was admitted on April 4th, 188 7 Passed blood on the 21st day, and on the four following days Was very delirious and had bad pleuro-pneumonia. Could not be kept quiet in bed. Died on the 21st April. Post-mortem examination showed pleuro-pneumonia of the right lung; large superficial ulcerations of the Peyer's patches, a large quantity of bowel being affected. There was still some blood in the intestines.

XXIX.—J. G., aged 36, was admitted on April 24th. Had had a persistently high temperature for over two weeks previous to admission. Bled about sixteen ounces on the 25th day. Is quite convalescent.

XXX.—C. B., aged 25, admitted on the 21st April. Had pneumonia and high temperature. Bled on the seventeenth and eighteenth days, about ten ounces. Is now quite convalescent.

Australian Medical Journal.

JUNE 15TH, 1887.

HOSPITAL ELECTIONS.

The first warning notes of the coming struggle for places on the Medical Staff of the Melbourne Hospital have already been sounded, though two months have still to elapse before the day of election comes round. It is greatly to be lamented that steps could not have been definitely taken long ago to alter the mode of election. Almost any method would be preferable to that now adopted. Some medical men may have objections to being dependent for place on a hospital committee, and it is possible that a system of canvassing, with its unpleasant accompaniments, would simply be intensified by having its area narrowed. But even that would be a better plan than election by subscribers of one pound and upwards, since members of the governing committee would of necessity act under some sense of responsibility, while the average annual or casual subscriber can hardly be supposed to know or care much about the comparative merits of candidates. It is hardly conceivable that the present absurd system could have been perpetuated, if the profession had been properly united in opposition to it, and there is good reason to fear that some, who are interested in the matter, have not been decided in their condemnation of it. Whatever may be the reason, however, we have before us one more contested election, and let us hope the last of the kind. But if the scandals associated with it cannot be altogether prevented, they can at least be minimised and rendered far less flagrant than they were four years ago. There were many persons then, lay as well as professional, who held that what was then enacted was nothing less than a public disgrace.

Good progress is being made with the arrangements for the Intercolonial Medical Congress. Dr. John Williams, of Melbourne, is to act as Chairman of the Medicine Section, and Dr. Whittle, of Adelaide, for that of State Medicine. Railway tickets for members travelling to and from the Congress, will be obtainable at half fares, and the Reception Committee has been busy with arrangements for a conversazione, excursions, &c., for the entertainment of visitors. Intending contributors should give notice of the subject of their papers to Dr. Poulton, the Secretary, at as early a date as possible.

Review.

DALBY'S CONTRIBUTIONS TO AURAL SURGERY.*

Anything from the pen of Sir Wm. B. Dalby will probably be read with interest, and on any subject in practical medicine nothing can be more valuable than short essays on particular points, illustrated by cases from the extensive practices of leading men, for by this means one is able without much effort to keep pace with the march of progress. As I had occasion recently to say, the crop of text books on Aural Surgery has been so prolific of late years, that really any little departure from the ordinary book on this branch of Surgery may be looked upon as a relief. Probably every medical man has studied one or more of these works, and has selected this or that author for his guide; but in this, as in other branches of Surgery and Medicine, specialists might copy with advantage the lead of Sir William Dalby, and give to the profession the latest results of their necessarily wide experience, without the trouble of wading through exhaustive treatises, which must for the most part be merely repetition. These contributions consist of eleven papers, all of which contain interesting and instructive cases, but No. V., "*Fatal Cases of Disease of the Middle Ear,*" should commend itself to the careful consideration of all, especially those who are interested in the question of life insurance. The little volume is printed in nice bold type, and is altogether very readable. C. L. M. I.

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* Short Contributions to Aural Surgery, by Sir William B. Dalby, F.R.C.S. London: J. & A. Churchill, 1887.

University Intelligence.

MELBOURNE UNIVERSITY.

At the meeting of the Council on the 15th ult., it was announced that Mr. H. B. Higgins had been elected a member in place of Professor M'Coy, resigned. Dr. Leeper forwarded his resignation as Member of Council.

Professor Spencer wrote, asking the Council to appoint a Demonstrator and Assistant Lecturer in Biology, and a skilled assistant as soon as possible. The letter was referred to the Finance Committee.

Mr. J. Cosmo Newbery wrote, resigning his position as Examiner in Chemistry at the Matriculation Examination. He did so because he thought it was desirable that the Professor of Chemistry should be the Examiner. The resignation was received, and Professor Masson was appointed to the vacancy.

Mr. Thomas Harlin, M.A., was appointed an Examiner in Elementary Physics.

The following resolution from the Medical Faculty, with reference to the admission of female students to degrees in medicine, was read:—"The Faculty of Medicine have had under consideration the remit of the Council of date 8th inst., in reference to the admission of female students to the Medical School. The Faculty are of opinion that there is only one method at present practicable of achieving the desired result, namely, to admit women to the same lectures and practical teaching as are open to men, inasmuch as, were the system of separate instruction to be adopted, with the view to the complete satisfaction of conventional notions of decency, there is hardly any class, if any, in the whole medical course that would not have to be partly or wholly reduplicated, thus necessitating a very large addition to the annual expenditure on salaries, and probably the appointment of several new lecturers; and even were this done the difficulty would still have to be encountered, of providing completely separate hospital instruction." The Faculty at the same time reminded the Council that no University in Great Britain undertook the medical education of women, and that in no medical school in Great Britain were male and female students trained together.

Appended to the report, transmitting this resolution, were communications from individual members of the Faculty of Medicine, giving their views on the subject. Mr. T. M. Girdlestone, F.R.C.S., wrote that it was not practicable to teach certain parts of the surgical course to a class of students comprising both sexes, and that it would be necessary to provide for ladies, who desired to learn surgery, separate lectures on certain subjects, separate instruction in the surgical operations on the dead body, and in a great deal of the clinical work in the wards of the hospital. Dr. Jamieson, with reference to the subject of obstetrics, wrote that it would be difficult to give full instruction to a mixed class of male and female students, and that on some topics he did not feel that it would be possible. He took this position, though not opposed in principle to the admission of women to the study of medicine. Professor Allen wrote that a separate school for women had been found necessary in London; and the Royal Free Hospital, which was associated with that school, was reserved for women students only. No lecturer on anatomy or pathology in Great Britain, so far as he knew, gave instruction to a mixed class. But the expenses of the establishment of a separate school would be large, and he therefore agreed with the opinion of the medical faculty, that at present the only possible method of educating women in Victoria for the medical profession would be to admit them to the same classes with male students without exception. But if this course were adopted, ordinary notions of decency must be disregarded.

In the discussion which followed, there were considerable differences of opinion expressed, and the following motion was ultimately adopted :—" That the Faculty of Medicine be requested to favour the Council with its opinion of what lectures of those specified in the regulations, chapter 10, should be delivered to women students, separately from male students, together with its recommendation of a scheme for the delivery of lectures in the Medical School, particularly distinguishing between such lectures as can be properly delivered to male and female students together, and such as should be delivered to male and female students separately."

At a meeting of the Council on the 8th inst. a letter was read from Professor Kernot, stating that he had placed the sum of £2000 at the disposal of the Council, for the founding of annual scholarships in Chemistry and Natural Philosophy.

A committee, consisting of Dr. Bromby, and Messrs. Ellery and MacFarland, was deputed to make arrangements for the appointment of Demonstrators in Biology and Natural Philosophy.

Letters were received from the newly-appointed Clinical Lecturers, pointing out that their salaries were lower than those of other lecturers.

On the motion of Dr. Madden, it was decided that the Council having, after careful consideration, dealt definitely with this matter, was not disposed to re-open it.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee on the 17th ult., it was resolved that the next election of honorary medical officers of the institution should take place on the 18th August prox.

It was further resolved to wait on the Premier, for the purpose of requesting that no steps should be taken, in the direction of permanently vesting in the University Council ten acres of ground adjacent to the University, until the question of a new site for the Melbourne Hospital had been settled. The land referred to is the portion enclosed within the University fence, at the corner of Madeline and Grattan Streets, on which it was lately proposed to erect a new hospital.

At the meeting on the 31st ult., it was decided to have a return prepared, from the date of last election up to the 31st day of

May, setting forth the number of days each physician and surgeon has visited the hospital, the number of in-patients treated by each, and the results attendant thereon; the number of capital operations performed by each of the surgeons, and the results; also the total number of out-patients treated during the aforesaid period, and that the whole be printed, and a copy sent to every member of the honorary medical staff, and laid on the table prior to the 1st July proximo.

The Committee has taken in hand the work of improving and extending the accommodation for the nurses of the institution. The large dormitories have been divided into bedrooms with two or three beds in each, and comfortable furniture and fittings provided. New buildings are in course of completion, which will provide accommodation for 18 additional beds for the nurses, and also for lavatory and baths, and other much-needed conveniences. It is intended to make further improvements in the quarters of the porters and other men employed on the staff. There is no doubt that the nurses have hitherto been miserably lodged, but it remains a question whether extensive additions should have been made to the permanent buildings, when the removal of the Hospital is, or should be, imminent.

ALFRED HOSPITAL.

At the meeting of the Committee on the 3rd inst., Dr. C. H. Molloy was unanimously elected as Resident Surgeon in place of Dr. J. Sutherland, resigned. An excellent innovation was introduced in connection with this election. Two Members of the Committee were appointed to meet two Members of the Honorary Medical Staff, for the purpose of considering the applications, and recommending the candidate or candidates considered most suitable.

Vital Statistics.

The report of the Government Statist on the Vital Statistics of Melbourne and suburbs, for April 1887, shows that the births of 1216 children, viz., 646 boys and 570 girls, were registered during the month. The deaths registered numbered 699, viz., 396 of males and 303 of females. To every 1000 of the population of the district the proportion of births was 3·27, and of deaths 1·88.

One hundred and twenty-five deaths occurred in public institutions. The number of children under one year who died was 203, the total number under five years being 271.

In April, as compared with the previous month, deaths from specific febrile or zymotic diseases decreased from 153 to 124, and those from local diseases from 353 to 277. Under the former head, deaths from typhoid fever fell from 59 to 57, and those from diarrhœal diseases from 78 to 48. Under the head of local diseases, deaths from brain and nervous complaints fell from 104 to 71, those from lung and chest affections from 65 to 59, and those from bowel and stomach complaints from 120 to 69. On the other hand, deaths from diseases of the urinary organs rose from 18 to 30, Nine deaths of child-bearing women occurred during the month, as against 6 in March. If these numbers be compared with the births during the same months, it follows that 1 death of a mother took place to every 135 children born alive in April, and 1 to every 221 such children in the previous month.

Local Subjects.

MEDICAL BOARD OF VICTORIA.—The following gentlemen have registered their qualifications :—Marcel Urbain Crivelli, South Melbourne, M.D. Paris, 1886; John McNaughton, Hamilton, M.B. et Ch.M. Edin. 1886. Additional qualifications registered :—George J. A. B. Halford, Beaconsfield, Ch.B. Melb. 1887; William C. Woods, Albury, M.D. Edin. 1886. . Name of deceased medical practitioner ordered to be erased from the register :—Joseph Taylor, L.S.A.

PUBLIC VACCINATORS.—The following appointments have been made :—Chiltern—Robert McCall, L.R.C.S., *vice* Frank Haley, M.B., resigned; Colac—Max Wall, M.D., acting temporarily during the absence on leave of Thomas Foster, M.R.C.S.; Wycheproof—Henry Stoker, L.R.C.S., *vice* C. H. Degner, M.D., resigned; Linton—George James Scantlebury, L.R.C.S., *vice* A. C. Robinson, M.D., resigned; Yarrawonga—Michael Carr, L.R.C.S., *vice* A. A. Denis, M.D., resigned; Arthur Augustus Fletcher, M.B., has also been appointed to act at Lygon-street, Carlton, and at the Manchester Unity Hall, Swanston-street, Melbourne, in conjunction with Edward Fletcher, M.R.C.S., the present Public Vaccinator.

HEALTH OFFICERS.—The following appointments have been confirmed :—Shire of Bright—John F. Wilkinson, M.B., *vice* George F. Wickens, M.B., resigned; District of Healesville, Bernard Stevenson, L.R.C.S.; Shire of St. Arnaud—Wycheproof District—Henry Stoker, L.R.C.S. I., *vice* Charles H. Degner, M.D. resigned; Shire of St. Arnaud--Donald District—Harloe H. Fleming, M.B., *vice* Gustave H. S. Zichy-Woinarski, M.B., resigned. Shire of Colac—Max Wall, M.D., during the absence on leave of Thomas Foster, M.R.C.S.

The movement in favour of steps being taken to check the pollution of the Yarra culminated in a deputation to the Premier on the 25th ult., for the purpose of presenting to him the resolution adopted at a meeting held at the Town Hall. The resolution itself was in very general terms, simply asking the Government to enfore the existing law, or to make whatever fresh legislation might be required. The deputation was a large and influential one, and several of its members spoke of the necessity of some action being taken at an early date. Mr. Gillies, in replying, said that there could be no difference of opinion as to the advisability of preventing the further pollution of the Yarra, but before the Government could take any action in the matter, the city and suburban councils must agree upon some general scheme of drainage. A draft of a bill to create a metropolitan board of works had been printed, and if the municipalities interested agreed to it without delay, the Government would take up the measure; and in the event of its containing no objectionable or very debatable clauses, he and his colleagues would do their utmost to pass it through Parliament during the ensuing session. In the meantime he promised to look into the existing law, with the assistance of the Crown Law officers, and to do what he could to enforce it.

The Melbourne City Council has adopted a bye-law making the use of deodorants compulsory in all earth closets and night pans.

Central Board of Health.—At the meeting of the Board on the 20th ult., the President complained that some of the country local boards had not forwarded any annual report, though repeatedly called on to do so. It was decided to ask the Government to relieve Dr. Shields permanently from some of his work, such as attendance at the gaol, that he might attend more fully to matters specially concerning the public health, the inspection of vaccination results being specially desirable. The question of vaccination by unqualified persons was largely discussed, and it was decided to recommend the insertion into the Amending Health Act of clauses, stating that such vaccination shall be no defence to a prosecution for breach of the act, and that a private practitioner can certify only as to vaccinations performed by himself.

At the meeting on the 10th inst., the Board adopted rules for the guidance of inspectors in dealing with the carcases of animals which had suffered from tuberculosis. These are, with slight alterations, those recommended in the Report of the Tuberculosis Board issued in 1885.

A progress report by Dr. Shields and the Assistant Inspector, on the outbreak of typhoid fever at the Geelong Grammar School, was read. It left the question of the causation almost an open one, but further inquiries are to be made.

BIRTHS.

Clendinnen.—At Haven, Hawksburn, the wife of F. J. Clendinnen, M.D.—a son.

Wilkinson.—On the 7th inst., at Preston, the wife of W. C. Wilkinson, M.B., of a daughter.

MARRIAGE.

Ralph—Young.—On the 1st inst., at the Catholic Apostolic Church, Queensberry-street, Carlton, Thomas Shearman Ralph, M.R.C.S.E., to William Helen Baker Young, second daughter of the late Robert Hunter Young, writer to Her Majesty's Signet in Scotland.

THE

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JULY 15, 1887.

Original Articles.

THE INFLUENCE OF CONCAVE GLASSES ON MYOPIA.

By **James W. Barrett**, M.D., B.S., F.R.C.S. Eng.

Demonstrator of Physiology and Histology in the University of Melbourne.
Late Assistant Surgeon to the Western Ophthalmic Hospital, London.

The discussions taking place in Europe at the present time on this subject have assumed such prominence that I have thought it worth while to prepare a brief *résumé* of the whole question of the determination of the glasses requisite in cases of myopia.

It has been assumed hitherto, for the most part, that myopia has been produced by a combination of two factors. (1) Softening of the back of the globe from congestion, arising from over use of the eyes, working or reading in bad light, working or reading at very small distances, stooping of the head whilst working or reading, in such a manner as to render the eyes dependent, or to compress the veins at the root of the neck. Such and similar causes have been set down as the predisposing causes of myopia. (2) Working and reading whilst the work or print are held close to the eyes. Such methods of working or reading require acts of excessive convergence, and by doing so apparently produce an increase of intra-ocular tension, which finally ends in the establishment of axial myopia.

It seems now to be generally admitted that over use of the ciliary muscle alone cannot produce myopia, for if that were so, then as the myopia advanced, and the necessity for accommodation diminished, the myopia would tend to cure itself.

When myopia is once established, it follows, as just stated, that (*caeteris paribus*) the exercise of the accommodation is diminished and the debateable question in the *optical treatment of myopia* is whether, in ordering glasses for persons between fourteen and forty years of age, the necessity for accommodation shall be removed *in toto*, or whether, by the use of glasses, the myopic eyes shall be rendered emmetropic, and shall be called on to exercise accommodation to the same extent as emmetropic eyes. Thus, supposing that an eye be myopic to the extent of 4 D (*i.e.*, the far point is at 25 cm.), according to the first method, a—4D lens would be ordered for distant vision, whilst reading would be effected without glasses. No accommodation would be used, and probably after a time, but little accommodation would remain to be used. If such a myopic eye were treated according to the second method, a—4 D, or—3·5 D lens would be ordered for constant use, so that to all intents and purposes the eye would be emmetropic, and in reading at 25 cm. the accommodation would be used to the extent of (approximately) 4 D.

The former proceeding and its modifications is practised by one school, including Landolt; the latter by many English and German ophthalmologists, including Foerster of Breslau.

The members of the school first referred to object to the constant use of fully correcting glasses, on the ground that it tends to increase the myopia. Any such increase must result from the action of the ciliary muscle, since the constant use of fully correcting glasses certainly diminishes the necessity for excessive convergence. The mere use, or even over use of the ciliary muscle alone, as already stated, is not sufficient to account for any increase, but it seems to be just possible that the constant use of such glasses may alter the relation obtaining between myopia and accommodation. On the other hand, the constant use of such glasses is attended with very distinct advantages.

In the first place, a myope constantly tends to bring print and work closer to the eye; the constant use of fully correcting glasses certainly tends to prevent him doing so, partly by rendering it possible to read at a fair distance and so to obtain illumination, and partly by causing him to experience much inconvenience from the accommodative effort required in very near vision. Stated shortly, the further away the myope can keep his work the better, for the less is his convergence, and the less is the chance of his stooping over the work. Of course certain exceptions must be made in cases of rapidly progressive myopia, or in cases of myopia of extreme grade.

But any spectator of the discussion will naturally ask—What are the facts? Does the constant use of the full correction increase the myopia, or does it not?

Foerster quotes fifty-one cases in which full or over correction had been constantly employed for years, and in which no increase of the myopia had occurred. In this experience, he will probably be in agreement with many ophthalmologists.

But another circumstance seems to have been lost sight of. Supposing that whilst wearing full correction constantly, an increase in the myopia takes place; how is it possible to ascribe this increase to the use of the glasses, and to eliminate other elements of causation?

Thus, the following objection to the practice has been made. If an eye rendered emmetropic by a glass is safe from increase of myopia, why is the emmetropic eye not safe? This is an incorrect method of reasoning, since an eye armed with glasses, and practically emmetropic, can be no more exempt from the influence of the conditions which produce the myopia, than the emmetropic eye is. If the armed eye is used for close and fine work, for bad print, in bad lights, in stooping positions, and under defective hygienic conditions, no one can suppose that an increase of myopia is not liable to take place.

It seems then that the prophylactic effect of glasses constantly used, is distinctly indirect.

Further, if it can be shown as a matter of fact, that the constant wearing of the full correction is not *positively injurious*, then they can certainly be recommended for use, since there is no question as to the convenience of using one pair of glasses instead of two.

Although the statement of experience, unless precise, is not to be commended, still, under the circumstances, I may state without prejudice, that during the last four years, I have ordered very many myopes glasses for constant use a little short of the full correction. I have re-examined several of these people after maximum lapses of two years, and I have not yet detected any marked increase of the myopia; yet at the same time, these people received accurate directions as to the mode in which they should use their eyes, so that if the myopia ceased to increase, it was probably in part due to a removal of the primary causes

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NOTES OF A CASE OF OVARIOTOMY—RECOVERY.

By ARTHUR F. DAVENPORT, M.B. Lond., M.R.C.S. Eng.

Miss H. W., æt. 24, from Hobart, consulted me at St. Kilda, on March 19 last, suffering from a very large abdominal tumour. She stated that she had always enjoyed perfect health until March, 1886, when she had some slight pelvic pain, followed three months later by a swelling in the left iliac region. This swelling gradually increased in size, while she herself rapidly lost flesh and strength. The catamenia entirely ceased in November, and from that time her feet and ankles, and gradually the whole of the lower extremities became very œdematous. There was no history of peritonitis, dysuria, or menorrhagia. Latterly she had suffered much discomfort from various pressure symptoms, owing to the rapid growth of the tumour. She had seen various doctors, but the tumour had never been tapped.

When she came to me she was much emaciated, and the œdema had spread over the lower part of the abdominal wall. The abdomen was very highly distended, and the heart's apex beat displaced upwards to the level of the fourth rib. The girth of abdomen at umbilicus was 43 inches. She was unable to lie down, and there was much difficulty in walking. The respirations were 30 to the minute, and very shallow. The tumour was mapped out with ease, and on pelvic examination was found to arise from the left ovary. No adhesions could be discovered, although they were found to exist largely at the time of operation; the large solid mass which formed part of the tumour, was likewise not diagnosed before operating, owing to its lying so far posteriorly. Apart from these pressure symptoms, she was feeling well, and sanguine of recovery.

It was resolved to remove the tumour by abdominal section, and on April 4th, I operated at 11 a.m., at Fitzroy-street, St. Kilda. Methylene was administered by Dr. Macansh, and I was ably assisted by Dr. Dunbar Hooper; Drs. Rankin and Richard Power were also present. The carbolic spray had been kept playing in the room for an hour previous to the operation, and all instruments, sponges, &c., used in the operation, had been carefully soaked in a 2·5 per cent. solution of carbolic acid before use. The incision extended at first from the umbilicus to within an inch of the pubes. Thirty pints of dark viscid ovarian fluid were drawn off by the syphon trocar, and it was then found that the great bulk of the tumour consisted of a solid mass situated posteriorly, which resisted all attempts at reduction in size, and it was likewise extensively adherent to the abdominal parietes, stomach, liver, and transverse colon. Some adhesions were divided between two fine silk ligatures—a few containing vessels as large as the radial—others were broken down. It being found impossible to further reduce the bulk of the tumour, the abdominal incision was extended upwards to within two inches of the ensiform cartilage, and the tumour then drawn out. The pedicle, which was broad and fleshy, was ligatured with silk in two places, and dropped back. The right ovary was found to be much enlarged and cystic, and was accordingly ligatured and removed at the same time. The peritoneal cavity was then carefully washed out with a warm weak solution of carbolic acid, all bleeding points secured, and the incision closed with deep interrupted silk sutures, twelve in number; intermediate horse-hair sutures being used superficially. The wound was dressed with salicylic wool, spread over a copious dusting of iodoform, and the whole secured with bands of strapping and a broad flannel binder. The operation occupied one hour and twenty minutes. The tumour with its contents weighed 48½ lbs.

During the latter part of the operation the patient was greatly collapsed, and ether was injected sub-cutaneously in several places, while it was necessary at the same time to keep up constant artificial respiration. She was put back to bed suffering greatly from shock. All available means were used to bring about reaction, and we were rewarded in about an hour's time with evidence of returning vitality. By evening of the same day she had rallied considerably.

The after treatment consisted principally in guarding against the occurrence of any vomiting and flatulent distension, with their accompanying disturbance of uniting and injured parts. Ice was given by the mouth, and a small enema, containing ten grains of sulphate of quinine, was thrown up by the bowel on the second day. By these means both of these troublesome symptoms were altogether avoided. The urine was drawn off by the nurse for the first forty-eight hours, and an occasional morphia suppository ensured freedom from pain, and secured rest at night. The wound was dressed for the first time on the tenth day, when it was found to have united kindly by first intention. The patient recovered without a bad symptom; was walking about her room on the fourteenth day from operation, and on the twenty-first day returned to Hobart, enduring a severe journey by steamer and rail of thirty-six hours, without more than ordinary fatigue. Five weeks from the date of operation, I had the opportunity of again seeing her, and found her completely restored to her former health and strength.

[The specimen was exhibited at the June meeting of the Medical Society of Victoria.]

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, JULY 6TH, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. Jamieson, Snowball, J. W. Barrett, Iredell, J. W. D. Hooper, Small, Courtenay, Loosli, A. J. Wood, Moloney, Sparrow, C. E. Gray, Bennie, A. S. Aitchison, G. A. Syme, F. D. Bird, G. Woinarski, Honman, Allen, J. Williams, Grant, Brett, Doyle, Nickoll, Daish, Barker, A. A. Fletcher, and Couper Johnston.

The President, Dr. WILLIAMS, occupied the chair.

The minutes of the preceding ordinary meeting, and of two special meetings, were read and confirmed.

One gentleman was nominated for election at the next monthly meeting.

The following paper was then read:—

PRACTICAL NOTES ON PUERPERAL SEPTICÆMIA.

By J. W. DUNBAR HOOPER,

Lately Senior Resident Surgeon Women's Hospital, Fellow Obstet. Soc. Edin.

Mr. PRESIDENT and GENTLEMEN,—It is necessary to state at the outset, that the data on which I have worked are entirely drawn from cases in the Midwifery Department of the Women's Hospital during the past two years.

The paper is not theoretical; every statement is founded on actual experience, and the honorary staff are in no measure responsible for the opinions I hold. This paper does not include prophylaxis. I have divided the subject into two branches. First, Diagnosis (differentiation of the varieties of puerperal septicæmia); and second, Treatment.

The Diagnosis is rarely so simple and easy as is generally thought. I have mistaken puerperal septicæmia for (1) typhoid fever, (2) pneumonia, (3) metritis, peritonitis, (4) puerperal mania, (5) acute rheumatism, (6) tuberculosis, and *vice versâ.*

It was on purpose to guard against such errors, and they are too commonly made, that I was forced to draw up a series of questions to be answered by the nurse, or clinical clerk, on my daily round; and I was thus enabled by a process of elimination to satisfy myself as to the nature of the case before me. (*Vide* Scheme for Examination, &c.)

For clinical teaching, it is sufficient to divide puerperal septicæmia into autogenetic and heterogenetic; each having a fairly distinctive group of signs and symptoms.

Temperatures must be taken in mouth or vagina thrice daily.

The *Diagnosis* of *Autogenetic* puerperal septicæmia. *Cause.*—Portions of placenta, membranes, or fœtid clot, left in utero. *Signs.*—(1.) Pyrexia from third to fifth evening. (2.) Tenderness over uterus. (3.) Alteration in lochial discharges. (4.) Salpingitis, peritonitis and perihepatitis. (5.) Bilious vomiting. (6.) Pleurisy, pneumonia and pericarditis. (7.) Profuse typhoid-like evacuations (very offensive) just before death. (8.) Rigors infrequent. None of these are essential, and none are pathognomonic of puerperal septicæmia.

Let us consider them seriatim :—(1.) Pyrexia may be due to many other causes, for our purpose the most important are:—(*a*) Vaginal ulceration, or "diphtheria." (*b*) Mania. (*c*) Enteric fever. I never saw a case of so-called *milk fever*, and therefore, am dubious as to its existence. (2.) Tenderness over uterus. If occurring after second morning, this is a sign to which I attach considerable importance. The iliac fossæ being distinctly free of pain on pressure. (3.) Changes in lochial discharge. Lochia may be intensely fœtid without patient having septicæmia, or even elevation of temperature; *and again, patient may have a severe form of septicæmia, and the lochia remain natural.* (4.) Peritonitis of a non-septic form due to exposure, is common. This form is marked by the violence of its pain. Septic peritonitis may be found at the post-mortem on a patient who during life did not complain of any abdominal pain. Mrs. S. had normal temperatures, taken thrice daily; did not complain of pain; had two severe rigors on sixth afternoon, and died in a few hours—septic clot. The pain may be completely hidden by opiates, which were given to lessen shock after severe labour. (5.) Bilious vomiting I regard as a grave omen if occurring after seventh day. (6.) Pleurisy.—I have more than once been misled into treating pleurisy or pneumonia only, letting them mask more important puerperal conditions, such as vaginal diphtheritic sloughs. Where pneumonia or pleurisy occurs on fifth evening, I now invariably examine parturient passages, with satisfactory evidence of other mischief. A short cough is often noticed prior to onset of rigors. (7.) I treated a case as "typhoid," because it had most of the signs of that fever without the rash, and on post-mortem, no peritonitis or any intestinal lesion was found—septic diarrhœa. (8.) Rigors when occurring at seventh to ninth day, are of most serious import, yet a puerperal patient having rigors, has not necessarily puerperal septicæmia. Rigors may be due to mammary abscess, pneumonia, &c. Yet after the onset of rigors, remedial treatment in septicæmia may be successful, as in the cases M. B.; or, as an instance of neglect to trace the origin of the rigors, take the case of C. L.

The *Heterogenetic* forms can be subdivided, but for my present purpose it is only needful to consider the whole group.

Causation.—(1.) By contagion (by fingers, instruments, &c.) (2.) Hospitalism?

Symptoms.—(1.) Persistent, steady, rise of temperature. (2.) Seldom any alteration in lochial discharges, except that of non-appearance for a few days, their return *non-fœtid.* (3.) No pain over uterus. N.B.—In many cases there is absence of abdominal pain throughout illness. (4.) Asthenic form of inflammation of serous membranes, endometritis, peritonitis, &c., with lymphy exudations found post-mortem. (5.) Vaginal abrasions, sloughs, or actual diphtheria (really by contagion). These signs are very rarely absent. (6.) Rigors, more noticeable by frequency than in severity; lips, fingers, toes, and ankles become dark blue, without rigors, yet a rigor will usher in septicæmia, though prior to its onset there has been no indication of trouble. (7.) The lungs are frequently involved, so that the patient struggles in respiratory difficulties for two or three days before death, and pneumonia is frequently stated in the certificate to be the cause of death, it really is secondary to the septicæmia. This form has a far higher death-rate than the *Autogenetic,* that means not so easily treated.

Treatment of Autogenetic Puerperal Septicæmia.—(1.) Prophylactic, above all measures, and exercise patience and caution during third stage of labour, so that no portion of placenta or membrane remains *in utero.* I strongly object to a routine practice of expressing placentæ by rule (*i.e.*, some 20 to 30 minutes after delivery of child), in hospital practice, because very few students or nurses thoroughly understand Crede's method, and for other reasons outside this paper. Be cautious in use of ergot at end of second or in third stage. (2.) Watch for any tenderness over uterus after second morning, accompanied by rise of temperature and quickened pulse; these, with or without alteration of lochial discharge, call for uterine irrigation. (3.) Irrigation to be employed with *great care.* I very nearly lost one patient by shock. It might form a paper by itself. Use $HgCl_2$ (1–3600), never Condy's fluid. I use packets of $HgCl_2$ and common salt, as described by Mr. Rudall. It has dangers of sore gums, peritonitis, and diarrhœa. Use double-channelled catheter. The favourable results of uterine irrigation, employed only when indicated, bringing away shreds and easing pain, and reducing the temperature are to be seen in twelve temperature charts exhibited at the meeting. If the irrigation does not improve patient's condition, an indication is given to use blunt scraper, very cautiously, as in M. B.'s case. Vaginal douche alone is worse than useless, for it admits impure air to vagina, without, in most cases, attacking seat of mischief, and there is danger of syringe and fingers being septic. *In this form quinine is useless, apart from surgical measures ;* I have so often seen it fail. Antifebrin will reduce temperature, but not remove cause of pyrexia. Sleep and ease from pain, and arrest of inflammation, are obtained by counter-irritation over uterus with tinct. iodi. (rarely t. stupes) and opium in some form. I prefer suppositories of morphia, hypodermic injections if delirious, or "Battley's." I don't like pills, often vomited, four or five at a time, and undigested. Stimulants—½ oz. brandy every 3 hrs., with tinct. digitalis to conserve heart. Fresh air, sunlight, good food, plenty of each. Don't starve puerperal patients, but it is most important not to disturb weakened digestion.

Treatment of Heterogenetic.—Find the cause.—(1.) *Fons et origo.*—Dirt, foul air, bad drainage, &c. Antiseptic midwifery means as absolute cleanliness as possible. (*a*) Hospitalism.—The term is often a cover for carelessness, or used as a conscience salve. (*b*) Vaginal sloughs (diphtheria).—Examine vulvæ and fourchette of vagina for sores and abrasions, they often are deep in vagina. Routine vaginal douching of puerperal patients is radically wrong. In Women's Hospital, I don't think 1 per cent. had the vagina syringed after confinement. (2.) Treatment of unhealthy abrasions.—(*a*) Change ward of patient, or to another room if in private practice, and examine drainage, &c. (*b*) Denude surface of ulcers, and prevent lochia touching by oiled lint or glass rod. (*c*) If margins undefined, apply tinct. iodine or liq. ferri persulph. (1–4.) If defined, encircle by ring drawn with pencil of caustic, then scrape surfaces and dust with iodoform. (*d*) These ulcers are very painful, but ease is obtained with morphia suppositories, without local sedatives. Pyrexia and hyper-pyrexia from unhealthy vaginal abrasions are very common, and in these quinine is useless unless surfaces are treated. (*e*) Internally tinct. ferri perchlor. is most useful when temperature falls, and tongue is clean. (*f*) Stimulants to make patient intoxicated. Especially watch for the low forms of inflammations—cellulitis, pneumonia, and pleurisy. Keep stethoscope constantly employed. (*g*) Sunlight and fresh air, most important factors in treatment. The above measures have resulted in keeping an *outbreak* of septicæmia from our doors. They require constant care, but invariably carry their own reward. I am doubtful about the necessity of isolation. *I don't fear a septicœmic woman infecting a healthy patient in same ward, unless by contagion.*

Before concluding, gentlemen, I must add that although I do not expect to have told you anything new, yet I felt that I ought not to be selfish in keeping such experience as I have gained in this subject for my benefit alone. I have, therefore, tried to condense and arrange it systematically, in the hope that these notes may be of service to others.

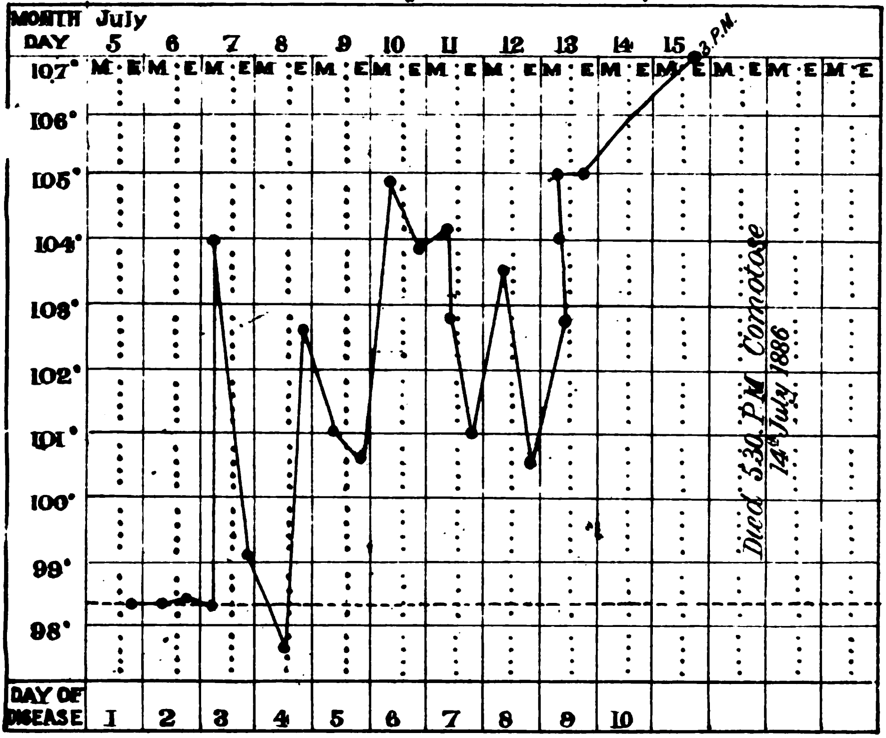
The difficulties in the Women's Hospital were considerably aggravated by the fact that the gynæcological and obstetrical departments were both visited and attended by the same honorary staff and resident surgeons. And, in the light thrown on the work of the Hospital by the careful and conscientious discharge of the duties of its pathologist, I sincerely hope that puerperal septicæmia may be a terror of the past.

The unpleasant task of making post-mortems during my term of office was generously undertaken by Drs. Moore, Fred. Bird, and the present pathologist, Dr. Syme. I had the advantage of Professor Allen's skill at the post-mortem on a particular case already reported.

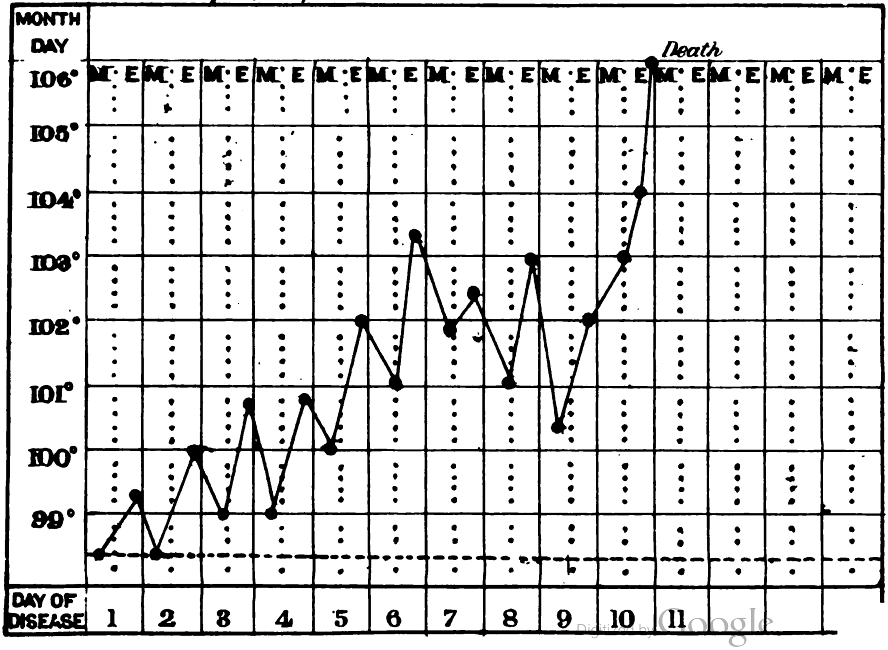
In any discussion with which this paper may be honored, let me remind the Society that I purposely limited my sphere, though I well knew that "Prevention was better than cure," and I avoided prophylaxis, as making the paper too long.

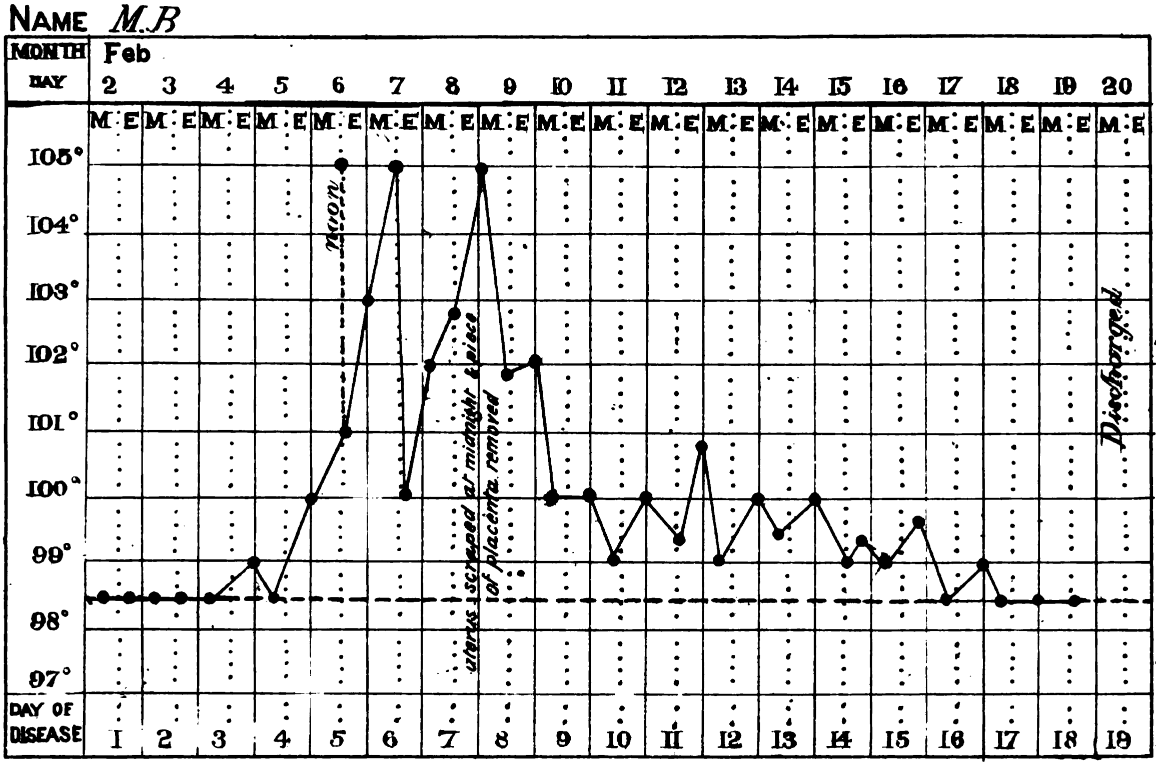
The method of uterine irrigation, which I employed on some 250 occasions, formed an addendum to this paper. It was found inexpedient to print many of the temperature charts shown (36), but three have been selected, showing what can be done on a correct diagnosis, or the fatal result of leaving a piece of placenta *in utero*.

NAME *C L* *Uterus not Irrigated. P. M retained piece of Placenta*



NAME *Mrs G* (*Irrigation of Uterus - ought to have been curetted P.M. retained piece of placenta*





Remarks

Septicoemia
. Recovery

Two Severe Rigors prior to Uterine Irrigation after that uterus scraped & decomposing pieces of placenta removed

No. Quinine Given

Never any Metritis or abdominal pain

THE EXAMINATION OF A PUERPERAL PATIENT.

Day of Puerperium; Pulse; Temperatures—Mouth, Axilliæ, Vaginal.

I. *Lochia.*—(1) Colour; (2) Quantity; (3) Odour; (4) Contents:—Clots—Colour and nature; *Shreds*—Size and nature; Membranes.

II. *Uterus.*—(1) Position; (2) Size; Consistence—Pain or tenderness on pressure.

III. *Abdomen.*—(*a*) Size, pain, tympanites; (*b*) *Iliac fossæ*—(1) Uterine appendages; (2) Swollen glands (?); (3) Pain (superficial or deep).

IV. *Vagina.—Inspection of Vulvæ*—(1) Abrasions; (2) Sores; (3) Ulcers (diphtheritic sloughs?). *Palpation*—(1) Os, laceration; (2) Cellulitis, hæmatocele, tumours; (3) Tenderness or pain; (4) Uterus—Bi-manual examination and by instruments.

V. *Perinæum.*—If lacerated? whether healing or not?

VI. *Breasts.*—Condition of nipples; presence or absence of milk; abscess forming?

VII. *Urine.*—Amount, colour, contents — (1) Albumen, (2) Blood, (3) Bile, (4) Casts.

VIII. *Bowels.*—Diarrhœa or constipation (painful or painless?)

IX. *General Condition.* — (1) Any constitutional taint or disease; (2) Sleep well? delirium, delusions; (3) Mental condition, pupils; (4) Headache; (5) Jaundice; (6) The presence or absence of circulatory or respiratory mischief; (7) Pain or swelling of joints.

X. *Surroundings of Patients.*—As to bedroom, drainage, access to pure air—ventilation.

XI. *Has any other patient suspicious symptoms of pyæmia?*—Abscesses or sores?

XII. *Endemic and epidemic diseases prevalent?*

Dr. **Jamieson** said that the thanks of members were due to Dr. Hooper for the care and time he had devoted to the preparation of his paper. The distinction between autogenetic and heterogenetic cases of puerperal fever was useful; but, as time went on, he had a stronger opinion that the truly autogenetic cases, deserving the name of puerperal fever, are comparatively few. Often the lochia were putrid, and slight pyrexia occurred; but these cases soon came to their end. In all the severe forms, or at least in a very large proportion of them, some contagium was present, whether the disease was peritonitic or the fulminant form of septicæmia. Prophylaxis was undoubtedly the matter of greatest importance; and it resolved itself largely into the limitation of interference, and into the maintenance of absolutely aseptic conditions. In ordinary cases, the use of antiseptic injections after labour is more apt to cause septicæmia than to prevent it. But, when severe symptoms arise, benefit will often accrue from the rigorous use of antiseptics. He could instance cases in which marked improvement followed; though, probably, striking cures would be met chiefly in autogenetic forms of the disease. When genuine infection had taken place, the symptoms generally progressed to a fatal issue.

Dr. Moloney said that it was refreshing to be told that there had really been puerperal fever in the Lying-in Hospital; and it was honorable to Dr. Hooper that he did not hesitate to speak of mistakes as well as of successful diagnoses. Good practitioners were made by the frank recognition of errors. He could not agree that puerperal fever was non-communicable. Very fatal cases of pneumonia might be classed as internal erysipelas. He thought that sulphide of calcium, administered for a week before labour, might be a useful preventive of septicæmia in puerperal seasons. In his own practice he had seen not more than six cases of puerperal fever; but his limited experience led him to think highly of the value of uterine irrigation; even a vaginal pad of antiseptic cotton-wool might be of service. Turpentine, so much lauded by Graves and Trousseau in typhoid, might also be useful as a curative agent. Dr. Hooper's paper was deserving of praise for its practical character, and its preparation must have involved much labour.

Professor Allen was glad to hear Dr. Hooper lay such stress on the evil results of uncleanly treatment, for reminders to this effect could scarcely be too frequent. The insidious character of the onset of puerperal septicæmia, and the value of uterine irrigation as a mode of treatment, were also matters well worthy of clear exposition. On some points, however, his experience in the post-mortem room led him to differ from Dr. Hooper. He could not attribute the same importance to lesions of the vagina in the causation of puerperal mischief. He did not remember any case of true diphtheria of the vagina, and thought that the foulness of any lacerations in that situation would rather be the effect than the cause of puerperal infection. Hence he was inclined to question the utility of any severe measures, such as scraping, applied to such lesions. Simple putrefaction of retained portions of placenta readily caused fever, but could seldom excite fatal septicæmia; experiments seem to show that one or two ounces of putrid fluid must be introduced into the blood in order to kill an adult. In the great majority of fatal cases, some specific organism probably invaded the blood through the uterine veins. Often the history of the process could be followed in the pathological theatre—the slowly progressive septic thrombosis of the sinuses, followed by septicæmia or pyæmia. The so-called milk fever seemed to be analogous to the surgical fever which followed ordinary wounds; but he would be glad to hear a paper on the febrile movements which occurred in the period immediately succeeding labour. As to hospitalism, it was a large subject; it meant simply a condition of hospital tending to retard recoveries, and to promote or even cause disease. It might depend on evil structure, or bad management, or overcrowding, or on the presence of a constant succession of infected cases. No doubt walls might become contaminated, but there was a greater danger from the cause last mentioned. Whenever post partum pyrexia became common in a maternity hospital, a rigorous investigation should be made, so that the causes of evil might be removed before more serious consequences followed.

Dr. HOOPER in reply, thanked the members for their kind reception of his paper. He agreed with Dr. Jamieson, that patients after labour should be interfered with as little as possible. The mode of performing uterine irrigation was important. The operation was by no means simple. He did not wish to say that puerperal fever was not transmitted from patient to patient, but though he had frequently tried to trace such transmission, he had failed. Direct contagion by unclean hands or some other error was far more frequently demonstrated. He recognised and dreaded hospitalism; but, in the Women's Hospital, his enquiries led him to connect cases of septicæmia with retained pieces of decidua, &c., overlooked in the third stage of labour.

LIFE MEMBER.

The Hon. Secretary announced that Dr. Moloney had presented to the Society Hall-debentures and money to the amount of £25, and had thus become a Life Member of the Society.

The following paper was then read :—

INJURY TO THE KIDNEY.

By A. **Honman**, M.R.C.S. Eng., L.S.A. Lond.

J. P., aged 21, on 29th of April during a football match was struck in the abdomen by the knees of a player, simultaneously with a blow on the back by another player.

I was called to see the patient on the morning following the accident, and found him lying on his back, complaining of pain in the back and loin. He was suffering from sickness, having vomited all the food he had taken since the accident. He had passed a small quantity of bloody urine, had a temperature of 100°, pulse of 110; was somewhat flushed, face pinched and anxious looking, quite conscious and intelligent, but in a condition apparently of reaction after shock. He gave a perfectly coherent account of his mishap, and stated that he "felt a bit queer" at the time of receiving the blow, but remained on the ground and finished the game, and then walked home. He was evidently at the time of my visit, in more pain than he then or subsequently admitted. His left loin presented a slight discoloration, and was distinctly swollen, the puffiness extending as far forward as the anterior axillary line. The left side over this enlargement was dull on percussion, the dull area marking the region of pain. I thought I could detect deep fluctuation, but such sensation was at best, but very vague. Upon passing a catheter, I found that the fluid first drawn off was bloody, and that latterly it was almost all blood. I may here state that he was able at first to pass water without catheterisation, but it became necessary to draw his water off within 36 hours of the accident. I ordered hot fomentations, and saw him the same night, but thinking that operative measures were desirable, I consulted with my partner, Dr. Molyneux, and it was concluded that the tumefaction was due to a collection of fluid, most probably urine, the result of some injury to the kidney or its pelvis, and that, as his condition was becoming more grave (the region of dulness increasing, and pain being present all over the abdomen, with some amount of tympanites), an outlet should at once be given to the extravasated fluid. To verify the diagnosis, the long needle of a hypodermic syringe was passed, and by it some blood-stained urine was removed.

The man was placed under the A.C.E. mixture, and I proceeded to cut down over the most prominently swollen part, the line of incision being somewhat more anterior than the usual one for extirpation of the kidney. The incision was free (over 2½ inches in length), and obliquely directed downwards and forwards; the subperitoneal tissue contained the expected fluid in considerable quantity. During the latter part of the operation I discarded the knife blade, and used only the handle and my finger-nail. I could feel the kidney very distinctly, as may readily be imagined from the specimen, and the tear in the kidney could be made out. A drainage tube was inserted close to the kidney.

The morning after the operation the pulse was 112, temperature 99·8°, tongue white, and breath sweetish. He expressed himself as much relieved; the tenderness over abdomen was much more localised, and the tympanitic condition had subsided. The wound was dressed (there had been a free escape of urine), and washed out with warm water douche; a catheter was passed, and about 3 ounces of clear urine drawn off from the bladder.

For a day or two he went on very well, and all pain had subsided, the wound however giving no sign of any re-action beyond a little blush around the edges, no pus being secreted.

His condition gradually got worse, uræmic symptoms set in, and the wound assumed a sloughy greyish appearance. There was a steady decline in temperature, 95° not being reached twice during the last two days. The pulse gradually increased in frequency, with the supervention of uræmic cerebral symptoms. For ten days before his death he suffered from intractable diarrhœa.

Throughout the fourteen days which transpired between operation and death, the wound was dressed and washed out twice daily. The discharge of urine was always free, but gradually became diminished in quantity.

During the last twenty-four hours the patient was restless and unconscious, and when seen one hour before death was suffering from general muscular twitching, and was irregularly convulsed.

By order of the deputy coroner, a post-mortem examination was made by Dr. Bray, when it was found that the left kidney was of a very large size—weighing over eight ounces; that it presented beneath the hilum a transverse ragged fissure extending nearly through the body of the kidney. The right kidney was found to be in a rudimentary condition, with scarcely any kidney tissue, its weight being about one ounce.

That a man after such an extensive injury should have been able to continue so violent an exercise as the game of football, and walk home after its completion will, I think, be regarded as somewhat remarkable, apart from the strange fatality which ruptured the one useful kidney. Of course the great size of the left kidney rendered its rupture a less remote contingency than if it had been of normal size and position.

Dr. **Moloney** said that the very interesting case submitted by Dr. Honman, illustrated strikingly the tolerance of injuries of the kidney, and the freedom with which operations may be performed on these organs. Yet a rudimentary state of one kidney would render any injury to the other extremely dangerous.

Professor **Allen** said that Dr. Honman's case was an illustration of what was probably a truth capable of broad application, namely, that retro-peritoneal injuries were often attended with very slight initial symptoms. He exemplified this by relating a case of rupture of the convexity of the second portion of the duodenum behind the peritoneum, the patient walking into the hospital on the morning after the accident, and having then a full regular pulse, the only symptoms being slight twisting pains in the abdomen and dryness of the tongue. Yet, within a few hours after admission, the patient vomited blood and died suddenly.

Dr. G. A. **Syme** remarked that a case almost precisely similar to that detailed by Professor Allen occurred at St. Thomas's Hospital, there being no shock and very little pain. The patient was sent away, but death occurred two days afterwards.

Dr. **Brett** remembered a very similar case of rupture of the kidney at Guy's Hospital. The patient had primary shock, but recovered, and a swelling formed in the lumbar region, from which large quantities of bloody urine were repeatedly removed. Death occurred from uræmia. In another case of laceration of the kidney recently reported, life was prolonged for about two months, the kidney shrivelling and the ureter becoming blocked.

The President, Dr. **Williams**, congratulated Dr. Honman on the interesting paper which he had read, and hoped that it would be followed by others.

EXHIBITS.

Dr. **Syme** then exhibited some pathological specimens.

The following specimens were exhibited at the last meeting of the Society by Professor **Allen**, but the notes concerning them were unavoidably held over:

(*a*) *Strangulated Hernia*, of the oblique inguinal variety, with two distinct coils nipped in the neck of the same sac. Also an old omental hernia from the inguinal canal on the other side of the same patient.

(*b*) *Malignant Tumour of the Right Kidney,* only slightly prominent on the anterior surface of the organ, but projecting into the pelvis of the kidney, and causing intermittent hæmaturia. The pain, which was considerable, was referred to the region of the *other* kidney, and was due to perinephritis.

(*c*) *Compound Hydrocele,* with dilatation of the tunica vaginalis, in front of the testis, and with a separate cyst above and behind the testis, on one side of the vas deferens. The two cysts were perfectly distinct, though separated only by a thin fibrous membrane. The fluids which they contained were similar in colour; but the fluid from the upper cyst was peculiar, in that a spermatozoon and numerous colloid cells were found in it.

(*d*) *Sacculated Bladder,* from a patient who died of chronic gout and contracted kidneys. The meatus urinarius was very narrow. The bladder was greatly hypertrophied and rugous. There were numerous deep saccular hernial outgrowths of the mucous membrane between the muscular bundles; and one of these outgrowths had formed a large cavity under the peritoneum, communicating with the interior of the bladder by a very narrow orifice.

(*e*) *Lesions of Cartilage of the Knee.* The lower end of the femur, obtained from a patient suffering from chronic gouty effusion in the knee-joint, presented two distinct lesions. On the patellar surface there was superficial erosion, the cartilage being soft, filamentous, granular. On the tibial surface there was a pit, with abrupt edges, extending down almost to the bone; and there was a similar pit, with less abrupt edges and less deep, whose walls and floor were formed by cicatricial tissue.

(*f*) Stenosis and calcification of the mitral valve.

(*g*) Scirrhous carcinoma of the lesser curvature and a large part of the posterior wall of the stomach, without pronounced narrowing of the pylorus. Pain and vomiting were inconspicuous.

(*h*) A portion of the liver of the same subject, studded with large nodules of moderately soft carcinoma.

(*k*) Sections of a liver containing numerous small knots of hard scirrhous carcinoma. These were obtained from a woman, whose right breast was excised on account of scirrhus. At the autopsy, no glands were found affected in the right axilla, and only one small one in the left axilla. The lungs were not affected. But, in addition to the nodules in the liver, the glands along the upper border of the pancreas were enlarged and of cartilaginous hardness.

British Medical Association.

VICTORIAN BRANCH.

Ordinary Monthly Meeting.

Wednesday, 29th June, 1887.

(Hall of the Royal Society, 8 p.m.)

Dr. Willmott presided, and there were about a dozen members present.

The election was announced of E. M. Inglis, M.B. et Ch. M. Ed., of Kew; B. Fyffe, M.R.C.S., L.R.C.P., of Fitzroy; and D. Grant, M.A. M.B. Ed., of Collins Street.

Exhibits.

Dr. Springthorpe exhibited Paine and Benger's Portable Sick-room Apparatus.

Dr. Springthorpe exhibited a patient suffering from Dilitation of the Aorta (?), of whom the following is the brief history:—

X. Y., æt. 25, no rheumatism or scarlet fever; syphilis five years ago, with glandular swellings and rash, but no alopecia, sore throat, or shin pain; history of extreme strain also, as a professional runner; symptoms recently and suddenly; palpitations not traceable to any drink, smoking, or excess of tea; indescribable feelings and pain in mid-sternal region, often unbearable in its agony, but without any dyspnœa, congestions, or œdema, and slight flatulence only.

Signs.—Thrill in vessels of neck; considerable enlargement of the left heart, and double murmur heard mainly in the aortic regions, but distinctly over the whole chest, front and back. The first sound roughened, the second replaced by a shrill musical note. Under pot. iodide, gr. xv., t.d.s., with rest, marked diminution in the force of the sounds, and quietening of cardiac action.

Dr. Springthorpe then exhibited the following pathological specimens:—(*a.*) Two fœtuses, with membranes entire. (*b.*) Case of heart disease, with very marked calcification of the mitral valve, and secondary changes in the left ventricle. (*c.*) Unusually large quadrilateral adhesion between lung and chest-wall, swollen with recent œdema. (*d.*) Bowel from a case of strangulated hernia, showing partial union between the two ends, after removal of an intermediate gangrenous piece.

A paper was then read

ON A CASE OF EXTRA-UTERINE PREGNANCY.

By Thomas Rowan, M.D., F.R.C.S.E.

Physician to the Women's Hospital.

Mrs. W., age 30. Two children; previous to marriage suffered severely at the menstrual periods. During the first week in January, and also in February 1886, menstruation was unusually severe, and accompanied by sensations never experienced before. In February the period lasted nine days, and did not return until six weeks had elapsed, when she was seized with severe abdominal pain, which subsided after a large dose of chlorodyne, but re-appeared on the 23rd of March with increased violence. On getting out of bed she fainted, and being alone, lay in an unconscious state for about two hours, when she was seen by her ordinary family attendant. She was then in a state of collapse, and complaining of severe cutting pain in the lower abdomen. The vagina was hot, and its arteries pulsated strongly; the cervix was soft, and there was marked fulness in the anterior fornix; the pain was relieved by opiates and hot fomentations.

On March 24th she was considerably improved, but felt weak and exhausted, with no appetite; bowels constipated; urine loaded with deposits, &c. On this date hæmorrhage commenced, and continued at irregular intervals till the end of June.

On April 6th dulness could be detected by percussion above the pubes, and by April 9 a distinct tumour could be felt in the middle line; vascular sounds, sometimes musical, could be heard over the tumour, and the fulness in the anterior fornix had perceptibly increased. The body of the uterus, pushed backwards, could be felt pressing on the rectum, and no doubt was the cause of a great deal of the pain and discomfort experienced during defæcation. From the 25th to the 29th of April the patient was able to move about, but had to lie down occasionally, on account of pains in the left iliac region. On the 29th she had an increase of pain, accompanied by an attack of hæmorrhage, and was confined entirely to bed and treated for pelvic hæmatocele. The tumour rapidly increased in size, and instead of retaining its mesial position moved into the left iliac region, where by the 4th of May, its apex could be felt close up to the anterior superior iliac spine; at this stage the whole of the tumour occupied the left side, and there was a distinct bulging in front of the cervix, which gave the impression of fluctuation. The apex of the tumour gradually moved upwards and inwards towards the mesial line, but now its growth was most apparent laterally, so that by the end of May it occupied the whole of the left iliac and hypogastric regions, most of the left lumbar and umbilical, and the greater portion of the right iliac. The cervix uteri was now well drawn up into the pelvis, and the bulging in the anterior fornix was less marked, at this time in the right ilio hypogastric region, and distinct from the large tumour could be felt a small nodule like a pigeon's egg, evidently the fundus of the uterus.

By the 24th of June, the tumour reached the umbilicus, and assumed a more symmetrical appearance, but its upper border was sharper than an ordinary pregnant uterus, and the umbilicus was retracted.

On June 25th the resistance of a fœtus could be made out by ballottement and palpation, the fœtal heart sounds and placental souffle were heard distinctly. During the month of June, the general health improved considerably, the attacks of pain were less frequent and not so severe, and the hæmorrhage took the form of a tarry discharge.

On the 1st of July the discharge had entirely ceased, and the patient was allowed to get out of bed, and from this date till the 24th of October she suffered little or no inconvenience.

On October 24th she was seized with sharp pains in the epigastric region and chest, which lasted until the 26th. There was then, and during several days afterwards, a very free discharge of blood from the vagina, and the breasts became distended and painful. The fœtal heart sounds could no longer be heard, but the placental souffle was still audible, and the fœtal movements had entirely ceased. The head was low down in the pelvis, and its sutures could be distinctly felt through the vaginal wall. The os uteri was patulous and soft. Soon after this, the tumour, which never rose more than two inches above the umbilicus, began to diminish, and the fulness in the breasts subsided. In November a similar attack to that of the 24th of October came on and lasted for a couple of days, but was not marked by so much pain as the October one. In December again the pain and other discomforts returned, only in a less marked degree.

On January 7th the patient came to Melbourne for my opinion, and told me she was carrying a dead child outside the womb, and wished to know if an operation could be done, in order to remove it without delay. I made an examination and satisfied myself that the condition was such as it had been represented, and decided to operate immediately. The tumour filled the left iliac and hypogastric regions and the left side of the pelvis completely, the uterus could be felt on the right side of the tumour, with its cervix still puffy, and the os patulous. The uterine sound passed nearly three inches, and clearly demonstrated the position of the uterus and its relationship to the tumour.

Operation on January 14th, assisted by Drs. M'Lean, Reid, and M'Donald. Methylene was administered by Dr. Reid and patient put fully under its influence. The incision was made in the mesial line extending from one inch below the umbilicus to within half an inch of the pubes, and the peritoneum opened in the ordinary manner. The large tumour which became visible, was of a dusky-brown colour, and at one part seemed to be slightly greenish and decomposed; this was in front and on the extreme left corner, just behind Poupart's ligament. The edges of the abdominal opening having been retracted in order to expose as large an area as possible of the front of the tumour, a trocar with tube attached was introduced into its most prominent part, when dirty-brown amniotic fluid to the extent of about ten ounces escaped. The cyst was then freely opened, and a fully developed dead fœtus removed in an advanced state of decomposition. The cavity of the cyst was immediately emptied of its fluid contents, and washed thoroughly with 1 in 100 solution of carbolic acid. The next step was to remove the placenta, but this was far from easy, on account of the thinness of the cyst wall, and the absence of any correct line to guide one as to how far it would be safe to go in the way of interference. The lower portion of the cyst filled the greater part of the pelvis, but more especially on the left side, and on the right side the uterus formed the boundary line. Every portion of the placenta was carefully removed, all débris sponged away, every bleeding point secured with silk ligatures, and all the free margin of cyst-wall removed and secured by ligature, then the edges of the cup-shaped or lower segments were drawn together and closed, in order to prevent the possibility of a coil of small intestine dropping in and getting inflamed or strangulated. At this stage about half a gallon of warm carbolic water, about 1 in 200, was poured into the peritoneal cavity, and allowed to come into free

sturbed condition of the circulation in close proximity to
terus, and that the sudden seizure of pain and collapse
n took place about the end of the third week in March, must
e been the time of quickening, and then it would follow that
bour pains which set in about the 24th of October, were nothing

more or less than the termination of gestation, or the time when labour would have set in under ordinary circumstances.

If we are right in drawing the foregoing conclusions, then the fœtus must have died about the 24th of October, or eleven weeks and five days prior to its removal, I quite believe that this view is correct, judging from the state of decomposition I found it in, as well as from the changes which had taken place in the cyst-wall already described. I feel very certain that a few days more must have seen all the fluid contents in the cavity of the peritoneum, had the operation not been performed when it was, and therefore conclude that the patient's life has been spared to her family by timely operative interference.

In conclusion, I may say that my reasons for bringing this case under the notice of the profession are: 1. That I believe it to be the first time the operation has been performed in Australia, with a successful result, so far as the mother is concerned. 2. That I wish to advise early operative measures in every instance where the diagnosis has been placed beyond a doubt, as it seems to me pretty conclusive that there is nothing to be gained by waiting, and too many risks to be encountered by postponing the operation until something definite takes place. 3. That I am anxious to guard any member of the profession against an attempt to drain the pelvic cavity through an opening in the abdominal wall, when he has the option of doing so into the vagina, in which direction fluid will subside by gravitation.

Dr. WILLMOTT complimented Dr. Rowan on the successful termination of a case, unique he believed in Australia. It would be a great gain if men with Dr. Rowan's advantages and Hospital connection, would bring their interesting cases under the notice of the Society. He would advise operation in cases of tubal gestation as soon as the diagnosis had been satisfactorily confirmed. He could scarcely think the present had been a case of tubal fœtation, it must have been abdominal from the age of the fœtus. There were many pros and cons about the advisability of making the second opening, and using a glass drainage tube into the vagina. The case, however, in every point, was a very remarkable one.

Dr. JAMIESON and Dr. HOOPER also congratulated Dr. Rowan on the result obtained in the case.

In reply, Dr. Rowan thanked the Branch for its courteous hearing of the case. The difference between the President and himself was more apparent than real. As to the placenta, he had referred to it in the paper, and sketched its position in a drawing which he handed round. He was a firm believer in the vaginal drainage tube.

In the absence of Dr. Henry, the discussion on "The desirability of seeking certain hospital facilities for outside practitioners," was adjourned.

Hospital Reports.

MELBOURNE HOSPITAL.

Some Cases of Primary Union of Wounds.

Under the care of Mr. Girdlestone.

Reported by Mr. J. F. Wilkinson, M.B., Ch. B., House Surgeon.

Case of Loose Cartilages in Knee-joint—Removal—Recovery, with a good joint.

O. J., æt. 24, seaman, admitted 24th January, 1887. About 14 days ago he first noticed the presence of two "lumps" in his left knee-joint. He suddenly got pain and swelling in his knee-joint, and this is now passing away, though there is still considerable effusion into the joint, and slight increase of heat in it. There are two loose bodies distinctly perceptible in the joint; they are freely movable, and can be brought to any position in the joint.

Patient had acute synovitis, from injury, ten months ago, but he completely recovered from this. Has never had any sudden acute exacerbations of pain in the knee-joint, except that just mentioned.

Was confined to bed, the leg placed on a back splint, and a cold lotion applied. The synovitis rapidly disappeared, and he was put on the table for operation on February 11. The patient was put under chloroform, and the two loose bodies brought over to he outer side of the joint; they were fixed in that position by an assistant, who also pressed on the patella, so as to prevent the bodies from slipping under it. The surface of the leg having been shaved, and carefully washed with perchloride of mercury solution (1 in 1000), Mr. Girdlestone cut directly on to the loose bodies. All hæmorrhage was stopped before the joint was opened, and then, the capsule having been opened, the loose bodies were removed by the fingers, with the assistance of a small lithotomy scoop; this instrument had to be passed into the joint, and there was slight difficulty in removing the larger of the two bodies. The loose bodies were apparently cartilaginous; they were quite free in the joint, were smooth with indentations, were flattened out and somewhat rounded in shape, the larger about one inch in diameter, the smaller half an inch. On opening the joint, a little clear synovial fluid ran away. The wound was gently sponged with perchloride solution, and a small drain tube inserted into its lower end. The skin edges were brought accurately together with kangaroo tendon—one suture was passed deeply through the synovial membrane. The leg was replaced on a back splint, and the wound dressed with iodoform and dry perchloride of mercury gauze.

February 12.—Temp. 99° n., 98·4° m. Is quite comfortable.

February 13.—Temp. 100·4° n., 98·4° m. Wound dressed. A little serous discharge on the dressings. No pain in the joint.

After this the temperature remained normal; pulse 80. Has no pain; feels very well.

February 16.—Tube removed to-day.

February 17.—A little serous discharge on the dressings.

From this onwards the case proceeded without trouble, and the splint was removed on February 28.

He was allowed up March 4. The knee was then a little stiff, but he could get about all right.

He was discharged cured on March 7.

Case of Compound Comminuted Fracture of Right Arm—Amputation—Primary Union.

T. F., æt. 24, farm labourer, admitted 28th February, 1887. Patient got his right arm caught in the cogs of a chaff-cutter, and sustained a compound comminuted fracture of the humerus, about midway between the shoulder and elbow. It was found necessary to amputate the arm, and the patient was put under chloroform. The axilla was previously shaved, and the arm washed thoroughly with perchloride lotion. The amputation was done by making anterior and posterior skin flaps, and a circular incision through the muscles, the bone being divided just below the tuberosities. All bleeding vessels were ligatured with tendon, but there was considerable oozing from the muscles in the posterior flap; this was controlled by the insertion of a long acupressure pin. The cut surfaces were carefully washed with perchloride solution (1 in 2000), and the edges brought together with deep silk and superficial tendon ligatures. A drain tube was inserted into the lower end of the wound, and the stump was dressed with iodoform and dry perchloride gauze.

March 1.—Temp. 98·6° n., 99° m. Dressed this morning; considerable quantity of serum and blood on the gauze; pin removed. Is feeling very well.

March 3.—Temp. 99·6° n., 98·4° m. Bowels confined; water has to be drawn off. Feels very well.

March 9.—Temp. 98·4° n. and m. Stump dressed to-day (second dressing); some blood on the dressings, this comes from the opening of the drainage tube; the edges of the flaps have united along their whole length; there is not a trace of pus anywhere. Drain tube and sutures removed.

March 18.—The opening left by the drain tube closed up in a couple of days, and patient was discharged to-day, quite well.

Division of all Structures in Front of Wrist-joint, with Wound into Joint—Primary Union.

W. D., æt. 27, admitted 4th January, 1887. Was struck on the back of the left wrist by a heavy block, which fell from a height, his wrist at the time being slightly bent over the edge of a sheet of iron. The blow inflicted a deep transverse wound in front of the wrist-joint, the wound dividing completely all the structures in front of the joint, and opening the joint itself. There was very free hæmorrhage at the time, which had been temporarily controlled by a tight ligature round the fore-arm. The patient was anæsthetized, and the two ends of the radial and ulnar arteries ligatured with tendon. The ulnar nerve was sutured with a fine tendon, as also was the flexor palmaris longus tendon. It was found impossible to separately bring together the divided ends of the deep and superficial flexor tendons, so they were sutured together in a bunch. The wound was carefully washed out with eucalyptus and olive oil (1 in 4), and a small drain tube inserted in the ulnar side, and the wound was partly stitched up. The wound was dusted with iodoform, and covered with clean absorbent wool, which had been sprinkled with eucalyptus oil. The hand was put on a zinc splint, in a flexed position.

January 5.—Temp. 98·4° n., 99° m. Is fairly comfortable.

January 7.—Superficial dressings removed, deep dressings not disturbed; very little discharge.

January 13.—Temp. normal. Dressings not yet disturbed; has sensation in thumb and first finger, but not in any others; has tingling sensations in fingers at times.

January 20.—Temp. normal. Can move all his fingers a little, and can move index finger separately from the others.

January 24.—Temp. normal. Dressings removed for the first time this morning. The wound has completely healed, with the exception of the opening from which drain tube projects. Drain tube removed. Dressed with eucalyptus and olive oil; hand put in splint again, still in flexed position.

January 31.—Slight discharge from orifice of drain tube; hand put up in nearly straight position. Discharged. Patient has been seen several times since, he has very little movement in fingers, and no sensation, except in thumb and index finger.

April 28.—Can flex the wrist freely, and can bend each finger separately, but has very little strength in flexion. Has returning sensation in little finger.

Compound Fracture of Leg—Immediate Closure of Wound.

W. B., æt. 13, admitted March 14, 1887, was knocked down shortly before admission by a spring van, which went over the lower part of the right leg, causing fracture of both bones, about the junction of the lower and middle third. There is a wound about half an inch long over the fracture of the tibia. The wound is bleeding freely. This was sealed up with several layers of lint soaked in Friar's Balsam, and a Lawrence back splint and two side splints were applied.

The boy's temperature remained normal all through, and the lint had not been removed from the wound when the leg was put up in plaster four weeks later.

Discharged cured at end of April.

Penetrating Wound of the Abdomen—Protrusion of Intestines—Operation—Recovery.

J. H. F., æt. 41, mason, admitted 20th February, 1887, at 7 o'clock a.m. Last night patient was carrying two bottles of beer between his shirt and abdomen when he ran against a stump and broke the bottles; the broken glass inflicted a small penetrating wound, about three-quarters of an inch in length, in the abdominal wall, a little below and to the right of the umbilicus. There was no protrusion at the time, and he consulted a doctor, who put some loose cotton wool over the wound and advised him to go to Melbourne, a distance of 13 or 14 miles. In the course of the night protrusion took place. He was brought down in a spring cart on the morning of the 20th, the result being that on admission to the hospital there was a double coil of intestine protruding, about twelve inches in extent—the gut was partly covered with loose cotton, which was firmly adherent to it; the surface of some of the gut was quite dry, and in contact with the man's rough shirt. Patient complained of feeling sick; pulse 72, regular; given morphia acetat. (gr. ¼) hypodermically, chloroform was administered, the protruded intestines were carefully cleansed with warm carbolic lotion, and the wound in the parietes enlarged both upwards and downwards. The intestines were then replaced. There was now a good deal of hæmorrhage from the depths of the wound, and in order to get at the seat of this the wound was still further enlarged. A great deal of clot was removed from the abdominal cavity, and also from a cavity between the muscles at the right side of the wound; the abdominal cavity was carefully sponged out with sponges wrung out of perchloride of mercury solution (1 in 2000). The edges of the wound were brought together with deep silk sutures (which included the peritoneum) and superficial tendon sutures—a drain tube was inserted in the lower end of the wound. The dressing was iodoform and dry perchloride gauze. The patient was given liq. opii. sed. m. v. every three hours.

February 21.—Temp. 99·2° n., 99° m. Pulse 102, weak. Had slight vomiting yesterday. Given ice to suck, and kept under opium.

February 22.—Temp. 99° n., 99·6° m. Pulse 84, soft. Has slight abdominal tenderness, no distension, no pain on breathing, no vomiting; slept well, had opium gr. ij. during the night. Has taken a little milk without discomfort; says he feels hungry. Tongue moist, coated; passes his water.

February 23.—Temp. normal. The dressing on the wound not yet disturbed. Is quite comfortable. Is taking very little opium. Has slight difficulty in passing water.

February 24.—Temp. 99° n., 98° m. Pulse 72, soft, full. Was rather fidgety last night. There was a "Torchlight Procession" in the street. Seems quiet and comfortable this morning. Water drawn off.

February 25.—Is doing well; taking nourishment (milk, chicken-broth, sago). Bowels confined. Abdomen soft.

February 26.—Temp. 99° n., 98·4° m. Pulse 72, soft. Last night was very restless; complained of fulness behind sternum, and pain on right side of abdomen. Has a tendency to vomiting; tongue loaded, moist. 1.30 p.m.—Is in a cold perspiration; has pain behind sternum; slight eructations of wind; abdomen soft, not tender. To have enemata of peptonised beef dissolved in ordinary beef tea, with a little brandy added, every 4 hours, and nothing by the mouth. An enema of caster-oil was previously given. 8 p.m.—Temp. 97°; is not in so much pain; still feels a lump behind sternum; has eructations of wind; bowels not open. To have mustard over epigastrium.

February 28.—Bowels have been freely open. Patient is much better. Wound dressed to-day for the first time since the day of admission; there has been no discharge to speak of; it is all united except at one point; deep sutures removed.

March 1.—Temp. 99° n., 98·8° m. Pulse 120, small, thready. Taking nourishment well; no pain; passes water freely; abdomen soft; tongue moist, cleaning. Slept well, but dreamed a good deal. Is taking 6 oz. of whisky daily.

March 4.—Wound dressed yesterday; slight superficial discharge from spot that is not yet quite healed. No distension of abdomen; has slight cough; bowels confined. To have oil enema. ℞.—Ammon. carb. gr. v., tr. scillæ m. xv., syrup aurant. ʒ j., aquæ ad. ℥ j., 4 tis horis.

March 12.—Is doing very well; wound is healed; there is a tendency to constipation present. ℞.—Tr. belladonnæ m. v., aquæ ʒ ij. Ft. hst. T.d.s.

March 25.—Allowed to get up.

March 30.—Has been getting about for some days. Last night his left leg was œdematous. It is less swollen this morning. Bowels confined. ℞.—Hst. mag. sulph. acid c̄. tr. ferri. perchlor. m. xv. T.d.s.

April 4.—Is quite well. Discharged, cured.

In none of these cases was the spray used. F. D. B.

Irreducible and Inflamed Omental Hernia — Herniotomy — Recovery.

Under the care of Mr. E. M. James.

Reported by Mr. G. T. Howard, Resident Surgeon.

S. P., laborer, was admitted into the Melbourne Hospital on April 8, 1887. For several years he has been subject to an easily reducible right inguinal hernia. Yesterday, in a township sixty miles from Melbourne, he was lifting a piano, when the hernia came down, and he was unable to reduce it himself, neither was the local medical man, even after applying taxis for several hours.

On admission, thirty hours after the occurrence of the hernia, there was seen a slight abrasion near the right external abdominal ring, a thick hard cord could be felt in the right inguinal canal, extending into the scrotum; there was swelling of the scrotum on the right side, and this swelling was irregular and nodular to the feel. In the scrotum and right inguinal region a distinct crepitation, as if from gas in the subcutaneous tissues, could be made out. No attempt was made to reduce the swelling until chloroform had been administered, and then only the slightest. This being unsuccessful, an incision 2½ inches long was at once made along the inguinal region, extending into the scrotum. There was a good deal of gas in the subcutaneous tissues. On opening the sac a considerable quantity of dark, blood-stained fluid appeared; also a large piece of omentum, which reached to the bottom of the scrotum. It was rolled up at the bottom, and matted together by soft vascular membrane, and was also softly adherent to the sac. There were several isolated, white, cord-like structures in the midst of the other omental tissue. Several of these were separately ligatured with catgut; the rest of the omentum was ligatured by a number of silk ligatures. It was then cut off below the ligatures, and returned into the abdomen. There was no bleeding from the omentum, and there was no marked obstruction at the internal ring. All superficial bleeding was stopped by ligature or torsion. The walls of the sac were approximated by a deep tendon suture; the wound was closed by deep wire and superficial horsehair sutures. No drain was used. Dressed with iodoform and dry dressing. To have an opiate.

April 9.—Temp. 98·4° evening, 99·4° morning; pulse 72; slept well; no abdominal pain or tenderness; slight vomiting, which was checked by a hypodermic injection of morphia (gr. ¼); wire sutures removed.

April 10.—Temp. 100·6° evening, 99·4° morning; feels well; no peritonitic symptoms; passing flatus per anum.

April 14.—Temp. and pulse normal since 11th inst.; bowels open on the 12th; remaining sutures all removed to-day, and the wound, which had only been dressed twice since the operation, was found to have united by first intention, except ¼ inch at the lower end.

April 20.—Patient, who has been quite well since the last note, was discharged cured to-day, the wound having quite healed.

Congenital Omental Hernia, the unclosed Sac of the Tunica Vaginalis being behind the Testicle, with Strangulation of Bowel at the Internal Abdominal Ring.

Under the care of Mr. E. M. James.

Reported by Mr. G. T. Howard, B.A. M.B. B.S., House Surgeon.

J. W., æt. 24, navvy, was admitted into Ward 18 of the Melbourne Hospital on March 31st, 1887. The patient was well at work three days ago, on the 28th inst. On the evening of that day, after straining at stool, he noticed a swelling in the right side of the scrotum and felt pain on the lower part of the abdomen. He also began to vomit. The swelling rapidly increased; the vomiting continued until admission. His bowels were not moved for at least three days. Twelve months ago, and several times since, he has had a swelling in the same place, but it always went away itself after a couple of days.

On admission, there was a swelling in the right side of the scrotum, oval, two inches in diameter; the skin over it is red, but there was no tenderness. The swelling was not transparent. The testicle could not be made out apart from the rest of the swelling. There was no impulse on coughing, and no gurgling was felt. The abdomen was greatly distended and tympanitic. An outside practitioner had failed in an attempt to reduce the swelling by the application of taxis; so also had the house surgeon.

Mr. James decided to do herniotomy at once. The patient was anæsthetised, and an incision about two inches long made over the swelling in the scrotum, and along the right inguinal region. The parts were very vascular, and bled freely. A structure, which appeared to be the tunica vaginalis, was cut through, and the testicle exposed. An incision, about half an inch long, was then made into the upper part of the anterior surface of the testicle; this gave rise to free bleeding; no hernial sac was discovered. There was a peculiar fluctuating swelling at the back of the testicle. A soft cord about the size of the finger could be traced from the testicle up through the inguinal canal to the internal abdominal ring. The testicle appeared to be much enlarged, but somewhat soft. There was no constriction anywhere, and the internal abdominal ring was patent. The hæmorrhage was arrested chiefly by torsion. A deep suture-ligature was used to stop the bleeding from the incision into the testicle. The wound was closed with horse-hair sutures, and dressed with iodoform and a dry pad.

April 1.—The patient has been vomiting almost constantly a thin yellow fluid with a sour smell. Has passed neither flatus nor fæces. Complains of pain at back of testicle, and in the region of the internal abdominal ring. Abdominal tympany no less. The fingers have a shrivelled appearance. Pulse 120, soft; temperature 99·4°. Tongue moist, slightly coated with white fur. Hyd. subchl. gr. x., sacc. alb. gr. xx., ft. pulv. sta. sum.

3 p.m.—At consultation it was decided not to open the abdomen at present, but to pass a long tube and give an enema through it; also to give tinct. bell. m. iv., aq. ʒj. 6$^{\text{tis}}$ horis, and to apply belladonna to the abdomen.

April 2.—Abdomen in same condition; swelling along inguinal canal less; vomiting constantly; bathed in cold sweat; the fingers are wrinkled and cold; the pulse, at wrist, is very feeble, counted at the heart, 148; no passage of wind or flatus. At noon, it was decided to open the abdomen. The pulse was then imperceptible at the wrist. A little chloroform was first given, then ether, and ether was injected under the skin. Mr. James then made an incision in the mid-line, through which he introduced his hand, he found a knuckle of small intestine twisted on itself, and caught at the internal abdominal ring. This was easily freed, but the patient died before the operation could be completed. At the moment of death a large quantity of thin yellow fluid poured out through the nose and mouth.

Autopsy at 10.30 a.m. on April 3, by Professor Allen, M.D. Notes by Dr. Moore. The body was well nourished and well developed. Only the abdominal cavity and the scrotum were examined. The small intestines in their upper part were much distended, and collected in the upper part of the abdominal cavity, completely hiding the stomach and transverse colon. The outer surface of the small intestine showed numerous distended capillaries.

The omentum was greatly stretched and was shaped like a fan, the broad part being at the stomach, and the narrow part about three and a half inches below, where it formed a rounded cord about the thickness of the middle finger. This cord passed in the midst of the coils of small intestine to the internal abdominal ring, which it entered. It was slightly thickened and of a livid colour, just external to the ring. The ring was quite patent, its anterior (upper) margin was thickened, white, and fibrous. Several inches of small intestine, lying in the right iliac region, were of a livid colour, and there was a patch of about one inch in diameter on the surface of the intestine, which was covered with a thin layer of soft vascular membrane. One small spot in this patch was white and softened, as if sloughing. This patch, on doubling up the intestine at its site, exactly fitted into an opening at the internal ring, between its posterior border and the omentum, dipping at its entrance into the ring. The patch of lymph only reached around a small part of the circumference of the bowel; but below the bowel was less distended than at some distance above, still it was not markedly collapsed.

The omentum was then detached above the transverse colon, with the portion of that structure to which it was attached; with the omentum were removed the internal ring, and the contents of the right side of the scrotum; then making a free incision into what looked like the back of the testicle, a cavity was opened, which contained a small quantity of blood-stained fluid and a portion of omentum. The cavity was formed by the greatly thickened tunica vaginalis testis, which was patent right up to the internal abdominal ring, communicating through that orifice with the peritoneal cavity. The right testis was of small size, and lay in the anterior wall of the cavity, its surface abutting on the cavity of the sac, was lined with a thin, soft, vascular false membrane. The omentum extended well to within a few lines of the bottom of the sac, through the whole length of the inguinal canal. At its lowest part there was some vascular thin membrane passing from it to the testicle and to the wall of the sac. The chief part of the omental contents of the sac was rolled upon itself, as if moulded, forming a soft cord nearly as thick as the ring finger, with a smooth vascular surface. Concealed by this was a smaller portion of omentum with thin recent adhesions to the wall of the sac. There was also some recent exudation at the internal ring. There was a small extravasation of blood on the inner surface of the sac. The anterior wall of the tunica vaginalis was greatly thickened, and to it was attached the testicle near its lower part. Its wall was partially cut through and the incision closed with tendon sutures. There was an incision about half an inch long into the tunica vaginalis close above the testicle; this was closed by a deep animal suture-ligature.

ALFRED HOSPITAL.

Two cases of Typhoid Fever, occurring during Pregnancy.

Reported by A. S. Joske, M.B., Ch. B., Resident Physician.

I.—M. H., æt. 22, was admitted, under the care of Dr. Jamieson, on April 23, 1887. She had been ill about ten days, with vomiting, persistent diarrhœa, anorexia, thirst, headache, cough, and general prostration. On admission, she was in a semi-unconscious state, and could give no proper account of herself. Had dulness at the base of both lungs, with fine moist crepitation. Tongue dry and cracked, and had a great deal of diarrhœa. Said to be three months pregnant, and has previously had two children. Temperature was 103·6.

On 27th April, at 4 a.m., patient was seized with violent bearing-down pains, and a profuse bloody discharge. On examination, a bag of membranes could be felt protruding through the os, which dilated rapidly; and a fœtus, of about 2½ months, with membranes complete, was expelled.

On the evening of 29th April, the temperature rose to 105°. There was abundant moist crepitation, and great dyspnœa, but no vaginal discharge. Twenty grains of quinine was given.

On the 30th April the temperature had fallen to 99°, without any sign of collapse. Had no expectoration; no pain; dyspnœa less.

On the evening of 2nd May, the temperature rose to 104·8°, but fell next morning to 97·4°, after twenty grains of quinine. The moist sounds were not so great at the bases; breathing easier; no expectoration, no pain.

The temperature rose, on the evening of the 3rd May, to 102°, and on the 4th May to 100°, but then fell to normal, never rising again. The patient progressed rapidly, and was discharged cured on the 2nd June. The treatment adopted was, bismuth and ether at first, till the diarrhœa ceased, then senega and ammonia, and the plain quinine.

II.—S. G., aged 21, was admitted, under the care of Dr. Embling, on April 14. She was eight and a half months pregnant, and for the first time, and had been ill with persistent diarrhœa, slight vomiting, rigors, headache, anorexia, thirst, and insomnia for seven days. Her lungs were resonant. Heart sounds good.

Temperature 103·4° Tongue moist, red at the edges, thickly coated with white fur. Pulse fairly strong.

Labor pains came on in the night of admission, but were lingering and irregular, and she was confined of a male child at 4.30 p.m. on the 19th of April; first child; delivery easy; placenta came away naturally.

On April 20 she developed a quantity of typhoid spots on the abdomen; has a good deal of discharge, some large clots coming away. No abdominal pain. Temp. 104° at night.

On April 25 she developed some rhonchi at the base of both lungs. Morning temp. 104·4°. Tongue moist, red at edges, dry in the centre. Bowels regular. No pain. No distension. Discharge good.

On April 28 her breasts were somewhat painful, and her cough troublesome. Has still a large crop of spots. Temp. at night, still high, 104°; but 101·4° in the morning. Discharge almost ceased, quite sweet, slightly brown still. Tongue cleaning well.

On May 5 the discharge had quite ceased. Tongue was almost clean. No pain. No distension. Feeling well. Temp. had fallen to normal.

On May 9 the temp. rose to 100°, and went up to 101° on the evening of the 14th, but there was nothing to account for the rise. The temp. fell to normal on the 16th May, and never rose again.

Patient was discharged cured on June 5. The child was living, and throve well.

The treatment, after labour was complete, was 15 m. of ext. ergot liq., and x m. of spt. etheris every three hours for four doses. Afterwards 2½ grs. of quinine was given three times a day, with x m. of tinct. scillæ. This was stopped, however, on April 30, and only plain quinine and a little acid given.

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JULY 15TH, 1887.

SMALL POX AND QUARANTINE.

We are somewhat peculiar in these colonies in the law and practice of quarantine. We may be inclined to agree with the English sanitary authorities, that the prevention of disease is mainly an internal question, one, that is to say, of sanitary improvement within the country, and less the keeping of disease out by restrictive measures. Local conditions, however, and especially our comparative remoteness from the great centres of population in older countries, supply what we consider justification for the use of quarantine precautions, such as are now completely abandoned in England. Of course we are in the happy position of being yet spared from the ravages of some diseases, which have acquired a firm settlement in most other countries. Of small-pox especially, we stand in constant dread, and rightly so, as there is more than a suspicion that vaccination has been much neglected in some of the colonies, and even in Victoria, which is probably the best protected of all, we have never had the measure of our protection tested, as the establishment of variola in the community alone can test it. But when we are in the ambiguous position of wishing to interfere as little as possible with trade and commerce, and with the boasted liberty of the subject; and at the same time desirous to enforce quarantine measures, difficulties will arise, and doubts about procedure will present themselves.

Such a case has occurred quite recently, and it is right that it should be considered, and some principle, if possible, arrived at for application in similar cases, which may readily enough occur. The steamer *Port Victor* from Hong Kong, *viâ* Singapore and Port Darwin, arrived at Sydney on 20th June last. There, a number of passengers left her, and she came on to Melbourne, which was reached on the 28th, the return voyage to Sydney being entered on two days after. All this time there was no rumour of sickness of a contagious kind having occurred on board. But on the 1st inst., a sailor named Alexander, who had left the ship at Sydney on the 20th ult., was found to be suffering from small-pox. He was at once isolated in the hospital ship, and all persons with whom he was known to have been in contact were removed to the quarantine station. The propriety of this measure has been shown by the fact that several of these persons have since shown symptoms of the same disease. Not only was this done, but as soon as the *Port Victor* returned to Sydney, she was placed in quarantine with all the persons on board. This was certainly a strict procedure, and possibly even involved some straining of the law of quarantine, since nothing had occurred on board of her, after she had been passed as clean, both at Sydney itself and at Melbourne. Whether the law was strained or not, at least there was consistency and vigour shown by the sanitary authorities, which public opinion in New South Wales will doubtless endorse, the event having justified the adoption of strict measures.

But perhaps the chief interest in connection with the matter for us lies in the contrast exhibited by the procedure of our Central Board. It is true that there has been no case of small-pox so far discovered in Victoria, and no reason to believe that any person, landing at Melbourne from the steamer, had been in contact with the man after he exhibited symptoms of the disease. Still, the history of the case seems to show that Alexander must have acquired the disease on board, in some way unknown, unless he did so at Port Darwin—a rather unlikely supposition. It is known that he did land there for medical advice, when suffering from an attack of intermittent fever, but there is no evidence that small-pox exists at that port. However, that may be, if the Sydney authorities were justified in putting those on board the *Port Victor* into quarantine, after having been in Melbourne, there was even greater justification for taking that step with passengers who had been in her previously. But vigorous action of that kind was not to be expected from a Board constituted as the Central Board of Victoria is. Practically nothing was done. Information was sent to the health officers of the various districts to which the passengers had gone, with the request that these might be subjected to medical examination. Report being made that none of those discovered, and they were by no means all, showed symptoms of illness, the Central Board relapsed into dignified inactivity. No directions were given to keep the persons under supervision, or to subject their clothing or other effects to some disinfecting process. Perhaps the authorities, as those possessed of official information about the facts, and alone possessed of power to take efficient steps, thought these to be unnecessary. Or could it have been the case that the bare notification of the presence of certain persons in the district was taken as sufficient to throw the responsibility on local boards and their health officers, though these had no official information, and no powers enabling them to act efficiently. If the danger of the introduction of small-pox into the Colony was real, then strict measures of quarantine should have been adopted, after the example of the New South Wales Board, since government officers alone could adopt them. The whole thing savours distinctly of an attempt to shirk responsibility, and, in one case at least, an attempt was made to get a health officer to undertake responsibilities, which neither his information nor his powers would have justified him in undertaking. It is not difficult to understand from such examples as this, why differences and misunderstandings between the Central Board and Local Boards are of almost constant occurrence.

It is to be hoped that we have once more escaped an outbreak of small-pox; but, if so, we certainly do not owe our immunity to any exceptional display of wisdom or activity on the part of the Government sanitary authorities. But further, in view of the possibility of a similar train of circumstances again occurring, it would be well that some authoritative judgment should be given, as to the comparative duties and responsibilities of Central and Local Boards. Luck and *laisser-faire* will not always save us.

INTERCOLONIAL MEDICAL CONGRESS.

President, J. C. Verco, M.D., F.R.C.S.; Chairman of Reception Committee, E. C. Stirling, M.D., F.R.C.S.; Secretary of Reception Committee, Melville Joy, F.R.C.S.

The Congress will meet at the University, Adelaide, on Tuesday, August 30 next, and sit each day until Friday, September 2.

His Excellency Sir W. C. F. Robinson, Governor of South Australia, one of the Patrons, has promised to attend the Inaugural Meeting, which will be opened by the President's address. The Chairmen of the Sections—State Medicine (Dr. Whittell, Adelaide), Medicine (Dr. J. Williams, Melbourne), Surgery (Mr. T. N. Fitz-

Gerald, Melbourne), and Gynæcology (Mr. Foreman, Sydney), will deliver opening addresses in their respective departments on the succeeding days, when sectional meetings will also be held.

Leading practitioners from the various colonies and others have expressed their intention of being present, some of them deputed to represent associations and institutions.

The proceedings of the Congress, with the papers read, will be published, and members will each receive a copy of such transactions.

The meetings in the Section State Medicine will be open to Fellows of Royal and other kindred societies. It is desirable that intending members should without delay register their names, that they may receive cards of membership and papers entitling them to claim the special reductions in fares granted by all the railway departments (half fares on producing certificate of membership), and intimate to the Secretary, the names of accompanying friends, that invitations may be sent for the various entertainments. The Chief Justice gives a conversazione on the opening night, the Mayor an official reception and luncheon, the Governor has expressed his intention of being at home to members of the Congress and their friends on one evening, and there are other engagements being arranged. South Australian members will invite the visitors to dine with them on the closing evening. The Literary Committee will be materially assisted in their work by early transmission of papers proposed for reading.

All legally qualified medical practitioners are eligible for memship on subscribing the sum of one guinea.

Communications may be sent to Dr. Poulton, Hon. Secretary, Adelaide.

Provision will be made for the exhibition of pathological and other specimens.

Reviews.

CANDLER ON CONSUMPTION.*

Independently of its merits, as a contribution toward the settlement of a great question, this book has a special interest, as the work of a well-known Melbourne man who has for many years given attention to the etiology of diseases of a zymotic and contagious character. It is an open secret that Mr. Candler was the writer of various publications on dysentery, diphtheria, &c., which bore the pseudonym "Mucor" at their head. He has taken advantage of his visit to England to see through the press the book now before us. The result of his studies of a subject of even more importance than those which formerly engaged his attention shows a comprehensive grasp of details gathered from many sources. To some extent the book shows a new departure, though there may be ample room for difference of opinion as to the accuracy of its conclusions. There is the same method followed as in Mr. Candler's previous contributions, an almost complete absence, that is, of positive contributions to the stock of knowledge, by way either of observation or experiment, or even by the collection of statistical data; and instead thereof an attempt to arrive at conclusions by a more or less speculative method, working on materials collected, as was said from many, and indeed from very miscellaneous sources. The general argument is that there is a special malaria or "bacillaria," located chiefly in houses, and above all in bedrooms, which is the main, if not the only source from which cases of phthisis take their origin. The influence of contagion, either directly from person to person, or by means of dried particles (sputum dust) suspended in the atmosphere, is strenuously denied. The influence of heredity, which seems so clear to most persons, lay or medical, is only admitted in what may be called a non-natural sense. This is the author's own conclusion from his train of reasoning:—"Further evidence could also be brought forward to show that the real influence of parentage in the matter of phthisis has consisted principally, if not wholly, in bringing together a number of human beings under one roof, and not in transmitting particular qualities to the offspring."

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* The Prevention of Consumption. By C. Candler. London: Kegan Paul, Trench and Co., 1887.

The author's main contention, to which he constantly recurs, is the existence of a tuberculous malaria, and on the proof or probability of this, the whole structure of his argument and of his conclusion rests. We must confess to strong doubts of the validity of this main contention, which is made to rest on proofs and arguments both of a negative and a positive kind. A start is made by offering objection to Koch's inference that the *bacillus tuberculosis* is a pure parasite, passing only from one animal body to another, since he found it incapable of growing, unless at a temperature approaching blood heat. In opposition, it is asserted that this inference is not well founded, because "there is nothing to indicate that Koch tried to grow the bacillus at lower temperatures *on every conceivable soil under all conceivable conditions.*" The italics are ours, and in the face of such demands, it is doubtful whether it would be possible to supply experimental evidence which would satisfy. After this leap in the argument has been taken, use is made of the generally admitted meagreness of direct evidence of contagion in the case of human beings the very able Lumleian lectures of Dr. Andrew being largely drawn on for facts and arguments. Of course if human beings, as subjects of tuberculosis are alone considered, it is certainly the case that proof of contagion having occurred in any considerable number of instances is hard to obtain, absolute proof, in fact, scarcely existing. But when observations on man are strengthened by observations and experiments on animals, in the way of inoculation, inhalation, and feeding, a sufficiently strong chain of evidence can be forged. We do not think that Mr. Candler has been very successful in his endeavour to provide positive evidence in favour of his malaria theory. In the absence of real cases, capable of verification as to name, place, and date, he is too often compelled to state supposititious ones, with, we fear, some tendency at a later stage of the argument to attach almost the same value to these supposititious cases, as might or would belong to real ones.

We must confess to having been forced into a condition of antagonism to the general course of the author's argument, from sheer inability to appreciate his scientific method, which seemed to us to be to the full as much the making of deductive as of inductive inferences, the former method being both less safe and more easily abused than the latter.

Having established, however, as he believes, the necessary inference "that ordinary phthisis is invariably caused by a *local bacillary malaria,*" the important question of prevention of necessity resolves itself into the avoidance of exposure to this malaria, and of course also its destruction. Prophylaxis, and the same might practically be said of cure, resolves itself into sufficient exposure to sunlight, which is considered to be the only, but at the same time the sure preventive measure. We wish we could share our author's sanguine expectations. Speaking of his primary position that phthisis owes its origin to "a local miasm," caused by the growth of an assumed parent form of the bacillus, in habitations where it is fostered by a deficiency of chemical action in daylight, he goes on to say:—"I have no doubt—I can have no doubt—whatever of the soundness of the assumption. It appears to me to be a forced conclusion. If this be affirmed by ætiologists, the period of the final disappearance of phthisis from any one, or from all of the several nations will depend solely upon their internal organisation, or upon their higher or lower civilization." And in another place—"All that has to be done is to let the sun into the infected rooms in the manner and to the extent here indicated, or to remove the occupants of these rooms into well-sunned rooms, leaving the unsunned rooms unoccupied. A year or less will tell its tale in the death-rate from consumption." It might be admitted that if this could be universally done, the prevalence and fatality of consumption would almost certainly be considerably reduced, but it would not be difficult to assign reasons for that result, other than the destruction of a hypothetical malaria or local miasm.

It must not be supposed that it has been attempted, or that it would have been possible, to give a exhaustive *résumé* of Mr. Candler's work. Whilst we have been compelled to express dissent from its main conclusions, and dissatisfaction with the author's scientific method, it is pleasant to be able to say that the book is written in a clear and vigorous style, is quite a storehouse of facts and arguments on the subject of the etiology of phthisis, and that we can strongly recommend its perusal to those of our readers who are interested in discussions of questions in general pathology. The book is handsomely got up, and is singularly free from the errors of the press, which are so apt to occur, where there are numerous references to authorities, very many of them foreign.

J. J.

TROUP ON THE SPUTUM.*

We must confess to having experienced satisfaction and pleasure on perusing this work, since the logical and scientific manner in which the subject is treated is not more noticeable than the pleasant language in which the author expresses himself. The author describes and illustrates the different constituents which may be present in sputum, and points out the significance attaching to their presence as revealed by examinations, which must necessarily be for the most part microscopic in character. The disease, in the treatment of which such examinations are most serviceable, is "Die Englische Krankheit," Phthisis, and to the examination of sputum, with a view to its detection before the physical signs are marked, the author has given much attention. He points out that elastic tissue is the most constant constituent of phthisical sputum, and that its presence may frequently be detected very early in the disease. The presence of curly elastic fibres in the sputum implies the existence of some destructive pulmonary or laryngeal disease, as distinguished from affections of the bronchi, and consequently is of the greatest assistance in diagnosis, especially "in the present day, when the tubercle bacillus, like Aaron's rod, swallows up every thing else." The tubercle bacillus ranks only second to elastic tissue in frequency of presence in phthisical sputum, and examinations for it are equally important. In connection with this matter, it appears to us that the author has made an oversight. He describes methods of staining bacilli, but fails in several instances to give formulæ for the stains. A book intended for use by practitioners should not be deficient in formulæ for a few simple bacteriological stains, and consequently, necessitate reference to another work. We cannot find formulæ for such stains as methylene blue, vesuvin, &c., while several pages are devoted to the description of modes of staining, such as Voltolinis, which are not generally used, and are not likely to be so. The plates are excellent. The formed elements in the sputum have been photographed, and reproduced by "photogravure." The bacilli have been drawn, coloured, and lithographed in the usual manner. The book is the most complete on the subject with which we are acquainted.

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* Sputum, its Microscopy and Diagnostic and Prognostic Significations, by Francis Troup, M.D. Edinburgh: Oliver and Boyd, 1887.

J. W. B.

University Intelligence.

MELBOURNE UNIVERSITY.

At a special meeting of the University Council on the 27th ult., Professor Kernot attended and handed in a cheque for £2000 for the founding of two Scholarships, in Chemistry and Natural Philosophy respectively.

At the meeting on the 4th inst., a report was received from the Finance Committee, recommending that £500 be apportioned to Professor Spencer to purchase apparatus for the purpose of fitting up his new biological laboratory.

The Report was adopted.

It was resolved that applications be invited for the position of Demonstrator and Assistant Lecturer in Biology. The salary is to be £400 per annum. The duties are to be:—To demonstrate to the various practical classes in the biological laboratories, to deliver such lectures as may from time to time be arranged, and to assist the Professors generally in the work of the biological department. In the event of a home candidate being selected, he is to be granted £100 for his passage.

It was also agreed to call for applications for the position of Demonstrator in Natural Philosophy, on similar terms and conditions.

Examiners at the Matriculation Examinations for the year, as well as Examiners in Arts subjects, at the Ordinary and Honour Examinations, were appointed. The only change made was in the appointment of Professor Spencer, in place of Dr. Neild, as Examiner in Elementary Botany. Dr. Neild has rightly complained that, after having been asked to accept this appointment, and having held it for four years without complaint, and even after having been again invited to apply for re-appointment, he should have been thus displaced without fair warning. This is by no means a solitary instance of a lack of courtesy and consideration, on the part of the Council, toward those who do what is surely the best part of University work, viz., teaching and examining.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee on the 14th ult., a letter was received from the Secretary of Lands, stating that he would give notice of any application from the University for the piece of land in Grattan-street, which had been under notice as a likely site for a new hospital.

The Secretary of the Medical Students' Society wrote, asking that a proposed periodical return, showing the attendance of and operations performed by the honorary staff, should also specify how many conformed to rules 6 and 18, which set forth that each physician and surgeon should visit his patients at least twice a week, and give clinical instruction at each visit to the students in attendance upon him.

It was generally agreed that the matter was an important one, but that there was no means of supplying the required information.

At the meeting on the 28th ult, the following motion was agreed to:—"That, inasmuch as the Medical Superintendent, owing to his absence at the last annual period, did not supply the usual yearly report showing the number of cases of death from blood-poisoning during the year 1886, a return be laid on the table showing (1) the number of in-patients during the year 1886, and also during the half-year ending 30th June, 1887; (2) the respective number of erysipelas and pyæmia cases contracted and admitted from outside during the respective periods, and deaths therefrom; (3) the respective number of erysipelas and pyæmia cases, and also deaths therefrom, during each of these periods, and the date at which such deaths occurred."

The election of office-bearers and members of committee was appointed to take place on the 28th inst.

At the meeting of the Committee on the 12th inst., a return was presented showing that out of the 5,745 patients admitted into the hospital during the eighteen months ending the 30th ult., 114 cases of erysipelas, contracted outside the institution, were admitted into it, while during the same period 21 cases of that disease developed themselves in the hospital. Of the patients who had contracted erysipelas outside the hospital seven died, as well as three of those who developed the disease after being some time in the institution, all the deaths taking place prior to 13th October, 1886, the last fatal case amongst those who developed erysipelas in the institution being on July 5 of that year. With regard to pyæmia, 14 cases from outside were admitted during the eighteen months referred to, and eight cases developed themselves in the hospital, and of these all but two died.

ALFRED HOSPITAL.

At the meeting of the Committee on the 17th ult., a report was received from the Hon. Medical Staff, that it is desirable to establish a Gynæcological Department in connection with the Hospital. It was agreed to forward the views of the Medical Staff as far as possible.

At the meeting on 1st inst., Dr. F. Harricks wrote to request that two beds on the surgical side of the house in each ward might be set apart, when practicable, for the accommodation of patients under the treatment of the out-patient surgeons. The letter was referred to the Hon. Medical Staff for report.

The President read a letter from the Chairman of the Central Board of Health, conveying to the Hon. Medical Staff of the Alfred Hospital, and to Dr. Joske, resident physician, an expression of the Board's appreciation of the skill, care, and attention displayed by them in the treatment of the typhoid fever patients who were admitted, during the period, February to May last, to the tents erected by the Board within the hospital grounds. Accompanying the letter was a valuable gold watch, presented to Dr. Joske by the Board, with the approval of the Chief Secretary.

The Committee resolved to charge the Central Board of Health the sum of 30s. per week for each typhoid patient admitted to the tents during the late outbreak. It had been calculated that this sum represented the actual cost of maintenance.

At the Annual Meeting of the Bendigo Hospital, on the 14th inst., Drs. Penfold, Hinchcliffe, Eadie, and McKee were elected Honorary Medical Officers.

Vital Statistics.

The report of the Government Statist on the vital statistics of Melbourne and suburbs, for May 1887, shows that the births of 1264 children, viz., 617 boys and 647 girls, were registered during the month. The deaths registered numbered 666, viz., 345 of males, and 321 of females. To every 1000 of the population of the district, the proportion of births was 3·40, and of deaths 1·79.

One hundred and fifteen deaths occurred in public institutions.

The number of children under one year who died was 134, the total number under five years being 210.

In May, as compared with the previous month, there was a decrease of 41 in the deaths from specific febrile or zymotic diseases, but an increase of 40 in those from local diseases. Under the former head, deaths from typhoid fever fell from 57 to 40, and those from diarrhœal diseases from 48 to 21; those from diphtheria, however, increased from 6 to 10. Under the local head, deaths from diseases of the nervous system rose from 71 to 77, those from affections of the heart from 40 to 52, and those from complaints of the throat and chest from 59 to 102. On the other hand, deaths from complaints of the bowels and stomach fell from 69 to 52, and those from disorders of the urinary system from 30 to 17. No less than 16 deaths of child-bearing women occurred during the month, as against 9 in April. If these numbers be compared with the births during the same months, it will follow that one death of a mother took place to every 79 children born alive in May, and 1 to every 135 such children in the previous month.

Local Subjects.

Medical Board of Victoria.—The following gentlemen have registered their qualifications:—William Edward Young, Melbourne, L. et L. Mid. R.C.P. et R.C.S. Edin. 1871; John Hugh Mackenzie, Tallangatta, L. et L. Mid. et F.R.C.S. Edin. 1880; Henry Nichol, Bendoc, L.R.C.P. Edin. 1860, M.R.C.S. Eng. 1859. Additional qualifications registered:—No. 881, George Le Fevre, Melbourne, M.B. 1878, M.D. 1883, Melb.; No. 1006, James W. Barrett, Melbourne, M. 1884, F. 1887, R.C.S. Eng.

Public Vaccinators.—The following appointments have been made:—Collingwood—Walter Macgibbon, M.D.; Collingwood—Alexander Steven, M.D., *vice* C. C. McFarlane, L.R.C.S., resigned; Donald—Harloe Henry Fleming, M.B., *vice* G. H. S. Zichy-Woinarski, M.B., resigned. Werracknabeal—William Chisholm Ross, M.B., *vice* W. J. Carroll, L.R.C.S., resigned. Winchelsea—John Macnaught, L.R.C.S., *vice* Henry Meyler, L.A.H.D., resigned; Lubeck and Glenorchy—R. N. Jack, L.R.C.S.; Ararat—Arthur Bowe, M.R.C.S., *vice* J. C. Weld, L.R.C.S., resigned; Bright—John Francis Wilkinson, M.B., *vice* G. F. Wickens, M.B., resigned.

Health Officers.—The following appointments have been made:—Shires.—Winchelsea—George M. Reid, M.B., of Birregurra; and John Macnaught, L.R.C.P., of Winchelsea, *vice* Henry Meyler, L.A.H.D., resigned; Chiltern—Robert McCall, L.R.C.P., *vice* Frank Haley, M.B., resigned; Flinders and Kangerong—Arthur M. Wilkinson, M.B., *vice* Tudor Hora, M.R.C.S., left the district; Grenville—George J. Scantlebury. L.R.C.P., *vice* C. Robinson, left the district.

Dr. Edward E. Rosenblum has been appointed a Junior Deputy Medical Superintendent, Hospital for the Insane, for six months on probation.

The epidemic of typhoid has almost run its course for the present season. During the six months ending 30th June, 1726 cases were reported to the Central Board of Health, including 398 which terminated fatally. The return of fatal cases may be taken as approximately correct, but this is by no means true of the general list, as medical men are not now under any legal obligation to report such cases, and very often give no intimation of the occurrence of cases under their care. It is probable that in the Amending Health Act some provision will be introduced, making notification compulsory in the case of epidemic diseases now present in the colony, as well as of those which it is desired to exclude.

Cases of small-pox have appeared in Sydney, and some fear has been expressed that the disease might break out in Victoria. A seaman from the steamer *Port Victor* left the ship at Sydney, and a few days after was found to be suffering from small-pox. Four persons from a house where he had been employed have since been affected at the quarantine ground, to which they had been removed. Passengers from the *Port Victor* were landed at Melbourne, to which she came on after leaving Sydney. We have remarked elsewhere on the different character of the procedure of the Government authorities in the two capitals, the Central Board at Sydney taking action at once, while the Melbourne Board, though expressing alarm and urging local bodies to activity, took no practical steps. The special interest of the matter consists in the difficulty as to the source from which the seaman acquired the disease. He could not have been infected before leaving Singapore, and could hardly have been so at Port Darwin, where the steamer called and where he landed. The most likely supposition is that he had brought on board, at Hong Kong or Singapore, clothing or other articles infected with the virus, and that these had been brought into use by him a few days before the ship arrived at Sydney. It may be expected that the sanitary authorities there will make strict inquiry on this point, as in that there may readily be a source of danger which cannot easily be guarded against.

In the Legislative Council on the 13th inst., Dr. Beaney moved that the Report of the Select Committee on the Condition of the Melbourne Hospital should be adopted. He pointed out that most of the suggestions of the committee had been carried out, but declared that new metropolitan hospitals were necessary, especially one in the northern portion of the city. He hinted at the desirability of the inception by Parliament of a system of municipal hospitals, supported by special rates. After a long discussion, the motion was withdrawn.

BIRTHS.

Walpole.—On the 31st ult., at Rosedale, the wife of G. A. Walpole, M.D., of a daughter.

Warren.—On the 26th ult., at Claremont, Studley Park Road, Kew, the wife of Dr. William Warren, of a son.

Wolfenden.—On the 9th ult, at St. Arnaud, the wife of Dr. J. J. Wolfenden, of a daughter.

DEATHS.

O'Hara.—On the 26th ult., at her father's residence, Merton, Elsternwick, Isabella, wife of Dr. O'Hara, aged 31 years.

Phillips.—On the 9th inst., at 30 Stanley Street, West Melbourne, John Walter Phillips, M.B. Melb., L.R.C.S. Edin., aged 39 years.

Teague.—On the 22nd ult., from a buggy accident, George T. Teague, M.B. Melb., aged 37 years.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in Pamphlet form by communicating with the Publishers before the issue of the *Journal*.

THE
Australian Medical Journal
AUGUST 15, 1887.

Original Articles.

ON MOVABLE KIDNEY.

By D. Grant, M.A., M.D. Edin.

Lecturer on Materia Medica, Medical Botany and Elementary Therapeutics, at the University of Melbourne; Physician to Out-Patients at the Melbourne Hospital.

On Movable Kidney.

Athough the first literary appearance of floating kidney was made in 1581, and although many cases have been put on record, on unquestionable authority, since the beginning of the present century, it is not many years since the very existence of the abnormality ceased to be regarded with much scepticism, even by physicians of high authority. Many careful observations, however, abundantly supported by post-mortem records, have established, beyond dispute, not only the occurrence, but the comparatively frequent occurrence, of movable kidney, and a recent publication on the subject gives a list of no fewer than 127 bibliographical references. Such a formidable catalogue would seem to justify the belief that the subject had been exhaustively considered from every possible aspect, but as I have lately become acquainted with four cases, and had an opportunity of studying the symptoms somewhat minutely, I am induced to think that a general review of the subject, and a brief discussion of some special points, may not be without interest. I shall begin by giving a brief account of the cases referred to.

Case I.

Was that of a retired medical man, aged 80, whom I saw and examined in October 1885. He had suffered much from dyspepsia in early life, but had for many years been entirely free from abdominal troubles. Within the last year or two he had again begun to complain of dyspepsia, with constipation, and a month or two before I saw him he had discovered a " tumour " in the left side of the abdomen, which caused him much anxiety, as he suspected carcinoma. His medical attendants denied the existence of any tumour, and attributed his local symptoms to mere hypochondriasis. He was very stout, but stated that he had been much stouter a few years ago, and the laxity of his abdominal walls, although they contained a considerable amount of fat, confirmed this statement. There was no evidence of organic disease, but on placing my hands over the left lumbar region, I at once felt a movable tumour, having the outline of the kidney. It slipped easily under the hand, could be pushed up under the ribs, and moved inwards to about two inches from the linea alba. Pressure caused a sense of discomfort, but no actual pain.

The symptoms in this case were very slight, consisting of local discomfort, with a little dyspepsia and constipation, and as the patient's mind was relieved by the recognition of the true nature of the "tumour," no special treatment was considered necessary.

No history of any injury, or of any cause likely to produce dislocation of the kidney, could be obtained; the only point in the history bearing on this being the recent loss of fat.

Case II.,

That of a gentleman, æt. 68, is peculiarly interesting as an example of a movable kidney discovered in childhood, and kept under observation for over sixty years. It was examined by the leading physicians in London and Paris sixty years ago, and various modes of treatment were adopted, but without good result. The chief symptoms in this case have been obstinate dyspepsia (for years the patient vomited after almost every meal), abdominal discomforts, great acidity, and frequent oxaluria. Notwithstanding these inconveniences, however, he has led a life of considerable physical and mental activity, and is certainly an illustration of the fact that the prognosis of movable kidney is not necessarily bad.

In this case the right kidney is the one affected, and the mobility is sufficient to be uncomfortably perceptible by the patient himself.

Case III.

M. M., Bonn, æt. 19, unmarried, employed as a laundress. This patient, whom I saw on November 29, 1886, had been in good health until six weeks previous to that date. She then, without obvious cause, began to suffer from severe dyspeptic symptoms, with constipation, and some colicky pains. She also had pain in the left lumbar region, and down the left thigh.

Uterine functions were normal, and the pains were not more severe at the menstrual period.

On examination she was found to be slender and thin, with little or no subcutaneous fat. The abdomen was somewhat hyperæsthetic, but on palpation a tumour could be pretty distinctly felt, occupying parts of the left lumbar and left umbilical regions, and having its lower border on a level with the umbilicus. The tumour was oval, smooth, and firm, and slipped about with considerable freedom. Pressure on it caused a peculiar pain. There was no disturbance of the urinary function. A spring truss, with a broad pad, was ordered in this case, but, as I left Bonn shortly afterwards, I am unable to say whether this treatment relieved the symptoms.

Case IV.

This is one whose progress I have been able to ascertain pretty fully, and, as it presents some interesting points, I may be allowed to relate it in some detail. In this case, a slight attack of intestinal irritation, in June 1878, first led to the discovery of a rounded smooth tumour in the right lumbar region of the abdomen. It was regarded as being most probably a fœcal accumulation in the ascending colon, and, as the symptoms passed off, no further notice was taken of it, and it actually remained unobserved for 5½ years. In 1882, marked dyspepsia became established, with gradually increasing constipation, and these conditions went on increasing in severity until December 1883, when an acute exacerbation occurred, chiefly distinguished by a peculiarly distressing pain, localised in the right iliac and right half of the umbilical region. This pain appeared to be due to over-distension of the cæcum and ascending colon, and had the peculiarity of coming on at night, and entirely preventing sleep. It was often accompanied by slight irregular peristalsis, limited to the same region. At this time, the "tumour" was again felt, and was at once recognised as the right kidney. It was not, however, associated with the symptoms, and was regarded as a mere anatomical curiosity. The diagnosis made was that of gastro-duodenal catarrh, and the treatment by "dieting," gastric sedatives and tonics, &c., was attended with very little benefit. During the first six months of 1884 a rapid gain in flesh occurred, while the local pain was reduced to a persistent discomfort, but this was soon followed by a relapse, with loss of flesh, more decided symptoms of intestinal irritability, and special pain of a peculiar kind, localised in the right iliac region. An examination, made in July 1886, enabled me for the first time definitely to recognise the movable kidney as a main cause of the gastro-intestinal disturbance.

In this case the right kidney is the movable one. In the recumbent position it retires spontaneously under the ribs, but, in the erect position, it falls till its lower border is on a line one inch below the level of the umbilicus. In falling, it rotates so that the outer border becomes directed downwards and outwards. By slight pressure it can be replaced, and its return is accompanied by a reverse rotation. When thus replaced (the patient still standing), it can easily be retained by the pressure of two finger-tips, pressed directly backwards under the lower edge of the liver. When it is down, a vacant space can be distinctly felt between its upper border and the lower border of the liver. It reaches inwards to a point one inch external to, and a half-inch above the level of the umbilicus, and deep pressure at this point causes considerable pain. The body of the kidney itself can be freely grasped between the fingers, and it is tender on pressure.

The special symptoms produced by it, in this case are, I believe, the following:—(1) the peculiar aching pain in the regions mentioned, always present, and having its maximum point one inch to the right, and half-inch above the level, of the umbilicus; (2) a permanent distension of the bowel in the regions named; (3) general impairment of intestinal digestion and absorption; (4) constipation, with occasional diarrhœa after unusual exertion; (5) pain and disproportionate fatigue of the right leg, after walking much, the pain being especially marked along the inner side of the thigh. There is no history of any cause for the mobility, except, possibly, a fall in infancy.

An important point, especially in its bearing on one theory of the predominance of *right* movable kidney, is the *influence of the respiratory movements.* In the *recumbent* position, the right kidney recedes under the ribs, and only its lower end can be felt by pushing the fingers deeply upwards. If a deep inspiration be now taken, the kidney descends forcibly, is very distinctly felt impinging against the fingers, and appears to have a range of movement of about 1½ inches. In the *erect* position, as I have said, the kidney can be retained *in situ* by the pressure of two fingers under the edge of the liver; but if now an ordinary inspiration be made, it descends perceptibly, with a slight downward and inward rotation, which necessitates the adaptation of the fingers in order to keep it up. If now a forced inspiration be made, the outward movement of the abdominal wall pushes the supporting fingers away, the kidney slips downwards under them, and at once takes up its lowest position. Some doubt has been expressed as to the influence of respiratory movements in causing or contributing to the production of movable kidney, but my observations have thoroughly convinced me of the energy with which a powerful descent of the diaphragm pushes the right kidney before it.

In considering the causes which lead to mobility of the kidney, it is well to begin by ascertaining the mode in which the organ is normally retained in position.

The kidneys are placed in contact with the posterior wall of the abdomen, with their inner borders at an average distance of three inches from the middle line. They extend vertically from the lower border of the eleventh dorsal vertebra to the lower border of the second lumbar, and the right kidney is said by some to lie a little lower than the left. The anterior surface, on the right side, lies under the liver in two-thirds of its extent, the remainder being covered by the ascending colon; on the left, the upper one-third is covered by the spleen, the lower two-thirds by the descending colon. The most important relation, as regards cases of mobility, is the close relation of the inner border of the right kidney to the descending portion of the duodenum and to the vena cava inferior, its close contact with the duodenum having been credited with the production of gastro-duodenal catarrh in cases of displacement. In this position the kidney is normally retained by two sets of agencies, viz., (1) anatomical attachments, (2) certain physical conditions.

(1) *Direct Anatomical Attachments.*—These consist of the tunica propria or fibrous capsule—a thin, smooth, easily-separated fibrous layer, which is prolonged over the fascia covering the vessels; and of the membrana adiposa or capsula adiposa, which constitutes the most important and direct agent in the fixation of the kidney, and has been called the ligamentum renis. It is formed by a prolongation of the peritoneal fascia propria, which divides into two layers, one passing in front of and one behind the kidney, and the two uniting at the hilus to form a somewhat firm layer of connective tissue. This layer is prolonged into the neighbouring

fascial structures, and has been described by Englisch as the ligamentum suspensorium renis. In the fœtus and child the capsula adiposa contains no fat, and in later life the fat, which has become deposited in it, is peculiarly liable to disappearance, when, from any cause, the general nutrition fails.

(2) *The Physical Conditions*, which tend to counteract the descent of the kidney, are chiefly two, viz., the general intra-abdominal pressure, and the action of the diaphragm. This is shown by the fact that opening the abdomen, or removal of the diaphragm, leads to an immediate descent of the kidneys. Any condition which causes a sudden diminution of the intra-abdominal pressure will tend to the same result.

ETIOLOGY OF MOVABLE KIDNEY.

The cause which is constantly tending to produce descent of the kidney is, of course, the action of gravity, and the cause which in any given case actually produces the change must act either (1) by increasing or favouring the action of gravity, or (2) by enfeebling the counter-acting forces. In the great majority of cases the cause belongs to the latter group, but there are also many conditions coming under the former category.

(1) *Causes in the State of the Kidney itself.*—The kidney may be enlarged, and thus increased in weight, by the presence of various tumours, *e.g.*, sarcoma, carcinoma, or cysts. It may be the seat of tubercular disease, with swelling and suppuration, or of hydronephrosis. All these conditions add to the weight and volume of the organ, and seriously impair the retentive power of the capsula adiposa. But this retentive power may also be diminished by the disappearance of the fat from the capsule itself, and this constitutes the determining condition in a very large proportion of cases. It is chiefly operative when rapid emaciation has occurred in previously fat persons, not only the fat of the renal capsule disappearing, but the large amount of fat stored up in the abdominal cavity, and thus not only the direct, but also the indirect, support of the kidney being removed.

(2) *Causes in the State of the Neighbouring Structures or Organs.*—Among these may be mentioned, as alleged causes, tumours of the liver or spleen, of the supra-renal bodies, or pancreas. Cases are also recorded (by Ebstein, Cullingworth, and Henderson), in which caries of the dorsal and lumbar vertebræ and psoas abscess had led to mobility of the kidney by removing it from its firm

basis of attachment. But the most important alteration of neighbouring structures, as regards the causation of movable kidney, is the condition of "pendulous belly," following repeated pregnancies, or (more rarely) resulting from great distension by ascites. The part which it plays as a cause of movable kidney probably accounts for the much greater frequency of the condition in women than in men. It was found by Landau in 25 per cent. of his cases, and other conditions dependent on defective tension of the abdominal wall were found in a large proportion of the remainder (*e.g.*, prolapse, retroflexion, hernia, &c.)

A curious theory as to the cause of movable kidney has been supported by Becquet, Lancereaux, and others, who maintain that at each menstrual period a congestion and increase of the volume of the kidneys occur, in consequence of an intimate connection between the ovarian and renal plexuses. This causes increased volume of the kidney and its capsule, with gradual dilatation of the latter to such an extent that the kidney ultimately becomes movable within it. It is pretty well established that the symptoms of movable kidney in women are usually more severe at the menstrual periods; but this may be sufficiently accounted for by the general increase of local excitability which accompanies menstruation, and it seems altogether irrational to invoke a normal function, normally performed, as the cause of an anatomical abnormality of such dimensions. As Landau pertinently remarks, "a direct causal connection between menstruation and movable kidney is on that very account (*i.e.*, on account of the intimate nervous and vascular connections of womb and kidney) to be set aside, for otherwise every menstruating woman must have a movable kidney."*

(3) *Causes in the State of the general Abdominal Tension.*—I have already said that one of the most important obstacles to descent of the kidney is supplied by the general intra-abdominal pressure which normally exists. This tension is determined by the relation between the volume of the abdominal contents and the capacity of the abdominal cavity, and is subject to perpetual variations, in the normal state, according to the varying degree of fulness of stomach, bowels, and bladder, and to the varying condition of the mesenteric vessels. A further variation arises

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* "So ist . . . . . ein directer Causalnexus zwischen Menstruation und beweglicher Niere schon darum abzuweisen, weil sonst jede menstruirende Frau eine bewegliche Niere haben müsste."

during pregnancy, when the tension becomes greatly increased by the enormous growth of the uterus. There is also probably a certain variation with the movements of respiration, the tension being increased during expiration, when the abdominal muscles contract, and diminished during inspiration, when the abdominal muscles are relaxed. Violent expiratory efforts, such as coughing and sneezing, produce a sudden and spasmodic increase in the abdominal tension; and a still more pathological increase occurs in cases of ascites, tumour, or great tympanitic distension.

Diminution of the intra-abdominal pressure may depend on diminution of the contents of the abdomen, or on undue flaccidity of its walls. Of the former of these, hernia, prolapsus uteri, and the sudden removal of the omental or sub-peritoneal fat may be referred to as examples; of the latter, the most notable example occurs in women, in the condition of "pendulous belly" already referred to.

Now, if it be true, as I think it is, that one of the most important conditions of the retention of the kidney *in situ* is the maintenance of the abdominal pressure, it seems scarcely reasonable to regard causes of increased abdominal pressure as causes of descent of the kidney. Yet authors mention such causes as straining during labour, straining at stool, the lifting of heavy weights, carrying of heavy children, &c. (Landau.) They appear to be misled by the apparent analogy of the uterus. Probably all these causes may have an important influence in producing prolapse of that organ, lying as it does near a large opening of the firm walls of the abdomen, an opening occluded by soft tissues which are never more than relatively weak in contractility, and are particularly liable to become flaccid and relaxed. The kidney, on the other hand, occupies a position in which any increase in abdominal tension must affect it equally on every side, and it seems therefore irrational to refer to such a cause as tending to produce displacement in any particular direction. There is one exception to this, viz., the violent and sudden increase in tension caused by coughing or sneezing, which may be regarded as capable of causing such an amount of *concussion*, so to speak, as to loosen the anatomical attachments of the kidney, and so to favour its subsequent descent. But it is difficult to see how an *equable* increase of intra-abdominal tension should tend to displace the kidney.

The case is very different with regard to diminution of tension, which, ex hypothese, must tend to favour renal displacement. Thus if an abdomen has been distended by pregnancy or by ascitic fluid, and has suddenly returned to its normal dimensions, or if a large part of the abdominal contents escape in the form of hernia or prolapse, the abdominal wall will not at once adapt itself to the change in volume, the tension will be diminished, and the kidney attachments will tend to become relaxed.

Another alleged factor, whose effect, if any, must be produced by change in the abdominal tension, is the *corset.* The chief authority for the injurious action of this garment is Cruveilhier, who says,—"J'ai rencontré plusieurs fois chez les femmes qui usent des corsets fortement serrés, le rein droit dans la fosse iliaque du même côté. Ce déplacement arrive, lorsque par la pression exercée par le corset sur la foie, le rein est forcé de l'espèce de loge qu'il occupe à la face inférieure de cet organe, à peu près comme un noyau entre les doigts qui le pressent." Now, although I have said that increase of the intra-abdominal tension, as such, does not necessarily tend to cause displacement and mobility of the kidney, yet the mode in which the tension is affected by tight-lacing is peculiar. The force is applied, not uniformly to the abdominal wall, but chiefly to the lower part of the thorax, and to that part of the abdomen covered by the lower ribs. In consequence of this there is—(1) a greatly increased pressure from above, which, if the abdominal muscles are weak, or the abdominal wall relaxed from any cause, may very well tend to push the kidney down; (2) and specially, the lateral expansion of the thorax in inspiration is impeded, the diaphragm descends more powerfully, and this being accompanied by increased relaxation of the abdominal muscles, the conditions must be favourable to a descent of the kidney. If this reasoning be correct, the damage done by tight-lacing (so far as regards the kidney) is due, not, as Cruveilhier says, "to the pressure exercised by the corset on the liver forcing the kidney from the niche which it occupies, &c.," but to the simultaneous increased descent of the diaphragm and increased relaxation of the abdominal muscles, during inspiration.

(4) *External Causes.*—Under this head are to be mentioned blows, falls, sudden violent exertions and such like, and there seems to be no reason to doubt that mobility of the kidney may thus be produced. Thus Roberts and Newman record cases in which the morbid condition was clearly attributable to falls, and

Landau reports two cases in which the movable kidney suddenly appeared, in one after the lifting of a heavy burden with the trunk bent laterally, in the other after a fall.

An important question with regard to etiology, is the question why the right kidney is so much more frequently dislocated than the left. So great is this difference, that of ninety-one cases collected by Ebstein, the right kidney was movable in sixty-five, the left alone in fourteen, and both in twelve cases; *i.e.*, the right was movable in a total of seventy-seven, the left in a total of twenty-six. Various reasons have been suggested for this, including the greater weight of the right kidney, the greater length of the right renal vessels, and the greater effect of the liver in transmitting the pressure of the corset, but the difference is not yet satisfactorily explained. Probably it depends upon the greater firmness with which the descending colon is attached at its upper end to the ribs and posterior abdominal wall, upon the shorter course of the left renal vessels, and upon the relation of these vessels to the third portion of the duodenum (Landau).

(*To be continued.*)

THE FRONTAL MIRROR.

By C. L. M. Iredell, M.R.C.S., L.R.C.P. Ed.

The train of thought which led to my writing this little note, was the recent triumph that Dr. Morrel Mackenzie has achieved, and the laurels which he has won for English surgery.

That Dr. Mackenzie has pre-eminent dexterity in the use of laryngeal instruments is acknowledged by all those who have had the advantage of observing him at work; but while admitting that he is *facile princeps* in this art, I would wish to urge that a considerable measure of success may be attained in affections of the throat and other cavities by most medical men, if they would only habituate themselves to the use of the means they have in their hands.

In these days, few medical men complete their studies without doing a course, either in the special departments of their own school, or at the clinics of some well-known specialist. It is therefore a matter of considerable surprise to me to observe that men, who have at some time or other made themselves familiar with the use and advantage of reflected light, should after a few years of private practice, during which they have improved by experience in their general knowledge, have so far forgotten what they learned, that if they possess a frontal mirror at all, they use it so seldom that it is almost useless.

It is a curious thing, but nevertheless true, that however knowledgeable a person may be theoretically, the power of recognising substances from their appearance, is only possible when this appearance is a matter of constant observation. For example, how few of us who have not kept up the work of microscopy could distinguish fearlessly the various tissues of the body, which we must all have been able to do at one time; a knowledge obtained probably at the cost of considerable trouble. So it is with the examination of cavities; only those who are in the habit of taking every opportunity of "seeing" these, will be able to recognise the conditions in which they may be found.

For the purpose of distinguishing objects in the recesses referred to, it is primarily necessary to get as much light thrown in as possible, and no appliance performs this so well as the frontal mirror, whether it be daylight or artificial light. By this means a concentration of purpose, if I may be allowed the term, is secured. The light is concentrated, causing a luminous point, and to this point the eye is naturally directed, to the exclusion of other objects, and the hand in like manner is directed by the eye.

So much is this the case, that it is absolutely necessary to warn the student, that in the examination of the mouth by this method, it often happens that while searching the pharynx, serious conditions in the parts lying anteriorly may be overlooked.

Well now all this is very old gospel, yet it is constantly brought under my notice, that patients are still examined by being taken up to the window and direct light used; that conditions are touched and interfered with, without ever having been "seen," and that errors of diagnosis are made in the most simple cases from a misapprehension of what "is" seen.

If the practitioner would make an undeviating rule of never dealing with anything within cavities unless seen and touched under sight, he would rapidly acquire very valuable information, to the inestimable advantage of everyone except the writer and his kind.

Of course, I am aware that a large proportion of medical men do use the mirror, and these will readily acknowledge the truth of my remarks; those who do not, will, I hope, at any rate, recognise the disinterestedness of the suggestion.

One more word before I close. In talking this matter over, it has often been said to me that the difficulty of obtaining good light renders this form of examination too troublesome for the general practitioner.

Well, in a climate like this, although certainly of late we have been suffering from the absence of sunlight, there are few days when sufficient daylight is not obtainable for all purposes, except, perhaps, for the thorough examination of the larynx; but a little ingenuity will generally supply an excellent light. Even in the poorest cottage, a chair, a few books, an ordinary lamp, and a spherical water bottle full of water, can be constructed into a really powerful illuminator; but it should always be remembered, that when it can be made available, nothing is at all comparable with sunlight, especially in those cases where it is desired to ascertain the "colour" of tissues.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, AUGUST 3RD, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. Neild, G. Woinarski, A. A. Fletcher, Moloney, Kenny, Davenport, J. W. D. Hooper, Grant, Iredell, J. W. Barrett, Allen, Williams, A. S. Aitchison, Jamieson, W. H. Owen, Syme, Fishbourne, F. J. Owen, Moore, A. J. Wood, Power, Joyce, F. D. Bird, Brett, Mailer, R. Aitchison, and Girdlestone.

The President, Dr. J. WILLIAMS, in the chair.

The minutes of the preceding meeting were read and confirmed.

The HON. SECRETARY reported that a letter had been received from the Government Statist, asking the date at which the Society was founded, and the present number of its members, for the information of His Excellency the Governor, in connexion with the Address of congratulation to Her Majesty the Queen. A reply had been sent stating that the Society was formed in 1855 by the amalgamation of previously existing Associations, and that it now included two hundred and seven members.

NOTICE OF MOTION.

Dr. **Moloney** gave notice that at the next Special Meeting of the Society he would move—"That in the opinion of the Medical Society of Victoria, the University Reserve south of the Medical School should be *granted* to the University for purposes subsidiary to the School of Medicine."

NEW MEMBERS.

Dr. **John Francis Molyneux**, M.R.C.S. Eng., L.R.C.P. Ed., of Williamstown, was elected a member, being proposed by Dr. J. Williams and seconded by Dr. Honman. One gentleman was nominated for election at the next monthly meeting.

The following paper was then read:—

THE TREATMENT OF ACUTE INFLAMMATION OF THE MIDDLE EAR.

By J. W. **Barrett**, M.D., B.S., F.R.C.S. Eng.

I purpose very briefly to ask you, not so much to listen to anything new in the way of treatment, as to give me an expression of opinion as to the right course to be followed in the treatment of a class of case which is attended with intense suffering, and with considerable danger to life.

The heading is rather misleading; two diseases are usually referred to—mastoiditis, and acute inflammation of the middle ear. The class of case I refer to can be classed purely under neither heading, in fact I believe no severe case of either affection conforms itself to the requirements of this pathological definition. These cases arise sometimes in the course of chronic otorrhœa, and sometimes in that manner which we usually describe as spontaneous. They are attended with (1) Swelling, redness and tenderness of the skin in front of the tragus over the mastoid and of the auricle. The meatus is often so swollen that nothing larger than a probe can be introduced. (2) Intense throbbing pain, referred in a general way to the ear. (3) Sometimes vomiting. (4) Usually fever. (5) The watch hearing is totally destroyed. In one case the tuning fork test gave a minus result also. The duration of the acute stage is from six to ten days approximately. It is often followed by purulent discharge from the ear, and generally ultimately by partial restoration of the hearing power. In these symptoms there is evidence of an inflammation involving the middle ear, meatus, mastoid cells, and even the labyrinth, and it therefore seems to me that neither the heading of the paper, nor the term mastoiditis, appropriately expresses the condition.

Two questions then I wish to ask the members present: (1) What is the numerical expression of the primary risk to life in these cases. (2) What treatment should be adopted.

(1) I have now seen six cases, of which one ended fatally. In this case, the acute inflammation supervened on a chronic otorrhœa. Death occurred from the presence of an abscess in the cerebral membranes, caused by an extension of inflammation, and not by pyæmia. At the Eye and Ear Hospital in Melbourne, where the cases would necessarily be of severe character, Dr. Kenny tells me the mortality has been four out of six.

(2) The treatment I have adopted has been very simple. Absolute rest in bed. Saline purgatives. The repeated application of large numbers of leeches to the tragus and behind the ear over the mastoid. Blistering behind the ear. Gentle syringing of the meatus with warm boracic lotion.

The questions which I have asked myself are these: Should the mastoid be trephined in the acute stage? Would the puncture of the mastoid cells relieve directly or indirectly? It is a very simple matter to perforate, and the risk of the operation is nearly nil.

The matter then resolves itself into this. Is it possible to formulate a rule defining circumstances under which the case may be left to the ordinary treatment, and those under which some form of operative treatment is required?

This is a preliminary communication, and I do not wish to commit myself too definitely, but I am anxious to obtain an expression of opinion from the members present on the points already alluded to.

Dr. Iredell said that it was important to distinguish primary acute inflammation of the middle ear from acute symptoms supervening on old-standing mischief. Active inflammation of the tympanic cavity and mastoiditis, leading to cerebral trouble, rarely occurred, except in patients with fistula of the drum of many years' standing. Primary inflammation very rarely led to acute destruction of the middle ear and cerebral abscess, unless in very young people or in tuberculous subjects. He had never met with a case. In primary inflammation, the orifice in the membrana tympani should be closed as soon as possible, so as to escape the great dangers attending the continuance of fistula of the drum. There was hardly a case in which the pain could not be stopped by leeches, and other simple treatment. Perforation of the mastoid bone was a trivial operation, but was not justifiable in the absence of evidence of mischief in the cells. Astringent lotions, such as sulphate of zinc, should not be used; they often did harm. Dry treatment was preferable, the ear being packed with cotton wool, and dusted with boracic acid or lycopodium powder. Old cases of perforation should wear pads of wool, which protected the middle ear, often improving the hearing, and sometimes allowing the fistula to close.

Dr. KENNY said that his experience as House Surgeon at the Eye and Ear Hospital during the last eighteen months led him to agree with most of Dr. Iredell's statements. Inflammation of the middle ear was often attributed to œdema and obstruction of the Eustachian tube; but as a matter of fact the tube was generally patent, and the swelling was more marked in the external auditory meatus. He had not seen a case of severe primary inflammation apart from old perforation of the drum and otorrhœa. But six cases presented themselves of acute mischief supervening on chronic otorrhœa, of which four proved fatal, notwithstanding incision into the mastoid bone, dividing the periosteum freely, and subsequent poulticing and attention to cleanliness. Leeching and depletion were out of place in such cases; but incisions gave great relief even though pus was not obtained. Death was generally due to pyæmia rather than to septicæmia. As to the causes of otorrhœa he had found typhoid fever stand third in order of frequency.

Dr. MOLONEY thought that abscess of the brain with consequent hemiplegia was a common result of chronic ear disease becoming acute, and suggested that the medical advisers of insurance offices should always enquire concerning history of ear disease and should use the aural speculum. Sore throat was often due to catching cold in the ear. The pain of acute inflammation in the middle ear might be relieved by local application of chloroform on flannel, or by the persistent use of very hot fomentations.

Dr. JAMIESON thought that there would have been more reference to the relations between acute ear mischief and zymotic disease. The influence of scarlatina was well known. At the Alfred Hospital, recently, acute inflammation of the middle ear occurred in two of his typhoid patients. In one the fever was in a very late stage when both ears became acutely affected; suppuration followed with fatal issue. In the other case, the fever had not advanced so far when pain manifested itself in one ear with tenderness over the mastoid. Spontaneous rupture occurred, pus escaped, and the boy recovered. Dr. Moloney traced disease of the throat from inflammation in the ear; but surely the mischief travelled in the reverse direction, the scarlatinal throat leading to tympanitis partly by direct extension of inflammation.

Dr. F. D. Bird remarked that periostitis of the mastoid was liable to be mistaken for disease of the ear. He had recently met two cases in which there was puffiness and swelling behind the ear, with high temperature and severe constitutional disturbance, complete relief being given by free incision over the mastoid.

Dr. G. A. **Syme** said that little attempt had yet been made to answer Dr. Barrett's questions. He had met very few cases with such universal inflammation of the meatus, tympanum, and mastoid as were described in the paper. He was convinced that the inflammation spreads from the throat along the Eustachian tube to the tympanum, and so to the mastoid cells or to the meatus, and not in the reverse direction. In scarlatina, measles, and other exanthems, it was important to examine the throat, and to treat any pharyngeal catarrh. Recently there had been a wide outbreak of measles, and he was astonished at the frequency and extent of such catarrh. He accordingly was on the watch for inflammation of the middle ear, but found great difficulty in catching it at its commencement. In two cases the ear became affected early in the evening, and at his visit next day he found the drum already ruptured. Whenever active inflammation of the middle ear followed pharyngeal catarrh, he strongly advocated early puncture of the membrana tympani. He agreed with Dr. Iredell that primary inflammation did not end fatally; but the importance of prompt treatment could not be over-estimated. Division of the periosteum over the mastoid was preferable to leeching, causing more free depletion, and relieving periosteal tension. Personally he had found nothing give so much relief as steam applied both to the throat and to the meatus. The Germans recommend ice to be sucked and applied over the mastoid, but steam was better. If the inflammation persisted, blistering and saline purges would generally arrest it. It should be remembered, however, that depletion might be carried too far.

Ear mischief often occurred in persons of low vitality, and often tonics, and even stimulants, should be given while local depletion was practised. He thought that Life Assurance examiners were now familiar with the risks attending perforated membrana tympani and chronic otorrhœa, for great danger must arise on the supervention of acute mischief.

Dr. **Moore** stated that during the last few years he had seen eight or nine cases die in the Melbourne Hospital from pyæmia, originating in otorrhœa with subsequent acute mischief. The patients were admitted, as a rule, in the later stages, when blood-poisoning was already in progress, and when no relief was possible. Sometimes the symptoms were not unlike those of typhoid fever, and care was necessary to establish the diagnosis. Not long ago a patient, who was treated for typhoid fever, and recovered therefrom, was re-admitted with pain over the mastoid, and died of pyæmia.

Dr. **Moloney** explained that everybody was aware that inflammation often extended from the throat to the ear; but his own experience taught him that inflammation of the ear was often set up by external cold; the influence of a cold shower bath, and of cold bathing was generally recognised; and it was said that in South Sea islanders, who passed much of their time bathing and diving, the meatus was often closed by thick porcellaneous growth.

Professor **Allen** said that as pathologist to the Melbourne Hospital during the past eleven years, he had never known death to follow primary acute inflammation of the middle ear; but he had seen a large number of cases, perhaps twenty, in which chronic otorrhœa was followed by fatal secondary mischief. In nearly all cases, as Dr. Kenny had pointed out, such secondary processes were pyæmic rather than septicæmic. At the autopsies, the condition of the middle ear varied greatly, but the signs of acute inflammation were almost always absent. The appearances were generally characterised by extreme indolence, the walls of the tympanic cavity being partly bare and more or less deeply eroded, partly covered with poorly developed grey granulations. These phenomena, in their apparent insignificance, were in strong contrast with the intense septic thrombosis of the lateral sinus, which was present in almost all cases, and often very extensive. In one instance, for example, the whole length of the right internal jugular vein was affected; its coats being thickened; its inner surface opaque, yellow, and rough; and its cavity full of yellow pulpy fluid, bounded below by more recent clot, which presented slightly into the corresponding innominate vein. Abscess in the substance of the brain, and diffuse meningitis, though occasionally occurring, were rare compared with septic thrombosis of the sinus. Probably the real danger in cases of chronic otorrhœa was not the occurrence of acute inflammation, but was septic contamination, the cavity of the tympanum partly filled with inflammatory exudation becoming a culture bed for micro-organisms. In the event of such a local septic process, the invasion of the lateral sinus was by no means remarkable; the wonder would rather be, if it did not occur.

The President, Dr. J. **Williams**, said that in his experience acute primary suppuration in the middle ear was pretty frequent, but he never found it seriously threaten life. There was now a case of typhoid fever in the Melbourne Hospital under his care which had run its course, when pain in the ear supervened with swelling in the meatus, and next day the drum was already perforated. The real danger to life was in the development of chronic otorrhœa; no one suffering from it was safe. He had seen a great many such patients from a physician's standpoint; but he could not agree with Dr. Moloney that there was any tendency to hemiplegia; the risks were those of general meningitis or pyæmia. He believed that some of the cases of so-called typhoid fever with consequent ear mischief were really cases of pyæmia following otorrhœa. Two instances in point occurred in his own wards. Both were sent in as typhoid. In one of them there was no difficulty in the diagnosis of pyæmia dependent on extension of septic mischief from the ear. In the other, though a gland in the neck was found enlarged, the true nature of the disease was ascertained only by the temperature chart being of distinctly suppurative character. Dr. Barrett's paper had excited an interesting discussion, for which the Society owed him its thanks.

Dr. J. W. **Barrett**, in replying, said that several speakers had referred to pyæmia following chronic otorrhœa. Undoubtedly there was great danger of such complication, but this subject was foreign to the purpose of his paper. His fatal cases were not pyæmic; and he recognised that, in septic poisoning following otorrhœa, there might be no severe local symptoms. He had dealt with cases of acute inflammation only, and in three of the six referred to there was no primary perforation, this complication occurring subsequently in the course of the inflammation. In only one of the six was any opportunity afforded of puncturing the membrane; in this instance he saw the bulging, the redness and the leash of vessels, but he hesitated to perform the operation, and by the next day the meatus was closed. In all the other cases it was impossible to get near the membrane. As Dr. Syme had remarked, division of the periosteum gave more effectual relief than leeching. The occurrence of periostitis of the mastoid apart from ear disease, as pointed out by Dr. F. D. Bird was important, but in his own cases, watch-hearing was completely lost. Though his questions had not been fully answered during the discussion, it was satisfactory to find that none of the speakers had seen acute inflammation of the middle ear end in death.

EXHIBITS.

Professor **ALLEN** then exhibited a large number of pathological specimens.

SPECIAL MEETING.

WEDNESDAY, AUGUST 10TH, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. Williams, Allen, Jamieson, Jonasson, Tweeddale, McInerney, Davenport, Jackson, E. M. James, Schlesinger, Iredell, C. Lempriere, Harricks, Loosli, A. S. Gray, Bage, G. H. Woinarski, T. B. Ryan, Neild, Girdlestone, Doyle, Archer, S. D. Bird, F. D. Bird, Joyce, Talbot, Hewlett, C. S. Ryan, Moloney, Snowball, Nickoll, Porter, Couper Johnstone, W. H. Embling, Springthorpe, D. Grant, Malcolmson, Hutchinson, W. Barker, Annand, Duigan, McCrea, R. A. Stirling, F. T. W. Ford, Fyffe, G. Graham, Daish, Clendinnen, A. A. Fletcher, A. Sutherland, Llewellin, Howard, Cox, J. W. Barrett, Fishbourne, Horne, Mailer, F. J. Owen, C. E. Gray, Sparrow, H. A. Embling, W. F. Morton, Lalor, Alsop, Honman, Molyneux, W. H. Owen, Hinchcliff, A. J. Wood, A. S. Aitchison, A. Morrison, M. B. Thomson, Lillies, A. G. Black, Brett, G. A. Syme, Courtenay, Webb, O'Brien, Joske, J. P. Ryan, O'Sullivan, W. Moore, Meyer, Workman, Rothwell Adam, Crivelli, Willmott, Macansh, McCarthy, Nutting, and Shuter.

The President, Dr. J. **WILLIAMS**, occupied the chair.

The President stated that the meeting had been summoned by the Committee for the following purpose:—"To consider

Dr. Springthorpe's complaint against the Committee in respect of the transmission to the Royal College of Physicians of the Circular addressed by him to the Governors and Subscribers of the Melbourne Hospital."

After a short preliminary discussion on points of order and procedure, the President called upon Dr. Springthorpe to state his complaint.

Dr. **Springthorpe** then read his complaint. He blamed the Committee for not having given him some notice of their intention to forward the circular to the Royal College of Physicians, and complained that no opportunity had been allowed him of appealing to the Society against the views of the Committee. He had been improperly singled out when other members of the Society had sent out circulars on similar occasions. The members of the Committee, who had sat in judgment upon him, had committed great breaches of etiquette themselves, and several of them were known to be hostile to him. The explanation which had been sent to the Royal College of Physicians was unfair, as it gave no account of the different practices which prevailed in the colony in regard to medical ethics, or of the frequency with which various medical men had advertised in the newspapers, and issued cards and circulars at elections. He stated that one of the members of the Committee, with whom he had spoken, had told him that he was adverse to the action of the Committee, and they had not therefore been unanimous.

Dr. **Neild** said he was, no doubt, the member of the Committee referred to, and what Dr. Springthorpe had said about him was false, as he had never made such a remark.

Dr. **Springthorpe** admitted that Dr. Neild was the member of the Committee to whom he referred, and said that their remembrances of the conversation which had taken place between them were different.

During the course of Dr. Springthorpe's observations, some members objected to the strong nature of his remarks and the personalities he used, but Professor Allen and others urged that every latitude should be given to him in developing his complaint in any way he thought fit.

Dr. **Harricks** moved—"That the Committee of the Medical Society acted in an arbitrary way in singling out Dr. Springthorpe's circular, for action thereon, without reference to the general body of the Society." Dr. Cox seconded the motion.

By request of the members, the Honorary Secretary read the papers and correspondence connected with the case, and also the minutes of the Committee meetings bearing on the question, and the names of the members of the Committee who were at the meetings.

The Honorary Secretary also answered various questions put to him by members concerning the forms of the Society, and the customs of the Committee in dealing with ethical matters, and concerning some of the personal matters alluded to by Dr. Springthorpe.

Dr. **Couper Johnston** moved the following amendment:—"That the Medical Society of Victoria endorse the action of the Committee in respect of the circular issued by Dr. Springthorpe to the governors and subscribers of the Melbourne Hospital."

Dr. **Hinchcliff**, of Sandhurst, seconded the amendment, and strongly supported the action of the Committee.

Many members joined in the debate, and before its close not a few had quitted the hall. The President finally read the motion and the amendment, and a division took place upon the amendment, which was declared carried—the voting being about fifty to fourteen. The amendment was then put as a substantive motion, and was adopted by the Society without dissent.*

Hospital Reports.

MELBOURNE HOSPITAL.

Contusion of Abdomen—Sudden Disappearance of Large Hæmatoma—Recovery.

Under the care of Mr. E. M. **James**.

Reported by Mr. G. T. **Howard**, House Surgeon.

P. B., brick carter, æt. 25, admitted into ward 1 of the Melbourne Hospital on March 22, 1887. Two hours before admission the patient fell off a dray laden with bricks, and the wheels passed over his abdomen. He was suffering rather severely from shock when admitted, but there were no external marks of injury, except a small abrasion at a tender spot just above the umbilicus. Hot bottles were applied to the feet and hot fomentations to the abdomen.

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* The Hon. Secretary has largely availed himself of the account of the proceedings which appeared in the *Argus* in preparing the foregoing report.

March 26.—Temp. on the night of 23rd was 101° ; normal next morning. Patient kept improving until this morning, when temp. again rose to 101·6° ; pulse 100; respiration 24; slight orthopnœa ; tongue somewhat aphthous. There is no abdominal pain nor tenderness, even on deep pressure ; but there is well marked dulness all over the abdomen, except in the right lumbar and right hypochondriac regions. Bowels open three times ; on one occasion he passed something like a bit of seaweed, with some brown fluid.

March 30.—Temp. night, 102° ; morning, 98·4°. Pulse 98, very feeble. Respiration 23. Has, for first time since admission, a cough, with slight mucous expectoration ; had a similar cough for some weeks before admission. There is dulness, absence of breath sounds, and vocal resonance at the left base ; coarse friction sounds a little higher up, and harsh breathing at the apex. Excepting slight harshness of the breathing, the right lung is normal. No peritonitic symptoms, and no change in abdominal dulness.

April 6.—Ordered pot. chlor. and bismuth. Temp. has, since last note, averaged 101° at night (rising to 103° on 2nd inst.), and 99° in the morning ; pulse 96, very feeble ; respiration normal ; no cough ; no orthopnœa. Abdominal dulness has become more circumscribed, being especially marked immediately over and to left of umbilicus. No peritonitic symptoms ; takes food and sleeps well. Has had slight diarrhœa for two days, but nothing abnormal in the stools. Ordered quinine gr. ij., t.d.s.

April 18.—From 6th to 15th temp. averaged 100° at night, 98·4° in the morning ; since the latter date it has been normal. Pulse has all along been about 90, and very feeble ; tongue clean ; bowels open ; general health good. There has been very little, if any, variation in the extent of the abdominal dulness, but latterly there has been continually increasing bulging just to the left of the umbilicus, and there is distinct fluctuation over this area ; no abdominal pain nor tenderness ; no chest symptoms.

April 21.—Bulging and dulness were both much less yesterday, and are completely absent to-day. On 19th bowels were open once, and three times yesterday. There was nothing whatever abnormal about fæces. There has been no abdominal pain, and temp. is still normal; pulse 80, and rather feeble; general health good.

April 25.—No bad symptoms have developed since last note, so patient was discharged cured to-day.

ALFRED HOSPITAL.

Extra Uterine Pregnancy—Operation—Death.

Under the care of Drs. Adam and O'Hara.

Reported by A. S. Joske, Resident Physician.

A. T., was admitted on December 25th, 1886. She was 31 years of age. She had been married 11 years, had had no children, but a supposed miscarriage six weeks previous to admission.

She was in her normal state of health up till four months previous to admission. She then had cessation of catamenia; four weeks after this she had abnormal pains about the abdomen. These passed off, but four weeks later she had similar pains, especially at the bottom and to the left side of the abdomen, and was confined to bed, and had some retention of urine. Three weeks later had a slight show, and passed a piece of membrane about two inches square; she then noticed a swelling appear at the bottom of the abdomen, midway between the umbilicus and left iliac crest; this swelling was hard, tense, and painful, and about the size of an orange. Has had, since then, headache, constipation, anorexia, thirst, and slight tendency to vomit. There was a swelling most marked in the left side of the abdomen, about three inches below the umbilicus and between it and the left iliac crest; this swelling was hard, tense, dull to percussion, and painful to percussion, and palpation. It was aspirated, and some very foul smelling, slightly blood-tinged fluid was drawn off.

Temperature was 103°; pulse 98; lungs resonant; heart sounds weak; urine regularly contained about 8 per cent. of albumen. Had always had good previous health. Had a metrotomy done three years ago.

On December 29, the temperature being still high and persistent, and tumor painful, patient was placed under the influence of chloroform. On examination per vaginum, the sound passed into the uterus for the space of 2½ inches, in Douglas' space a hard substance could be felt. Dr. O'Hara made an incision in the abdominal wall 2½ inches long, from the umbilicus to about 1½ inches above the symphysis pubis, and a tumor was exposed; this was incised, and a quantity of foul-smelling fluid evacuated, and a fœtus 2 inches long came away with the fluid. The placenta was partially adherent to the bottom of the sac, and could be only partially detached. The cavity was washed out, its sides stitched to the walls of incision, and a drainage tube placed in the cavity, and the wound closed. The temperature before the operation was 102°, but at 8 p.m. fell to 98·8°, the patient was fairly easy under the influence of morphia; the tube was discharging freely.

Patient progressed fairly well, but the temperature rose to 103° on January 2nd.

On January 5 the patient became slightly delirious, and the discharge stopped; the temperature rose to 103°, and as the discharge appeared to be bagging, Dr. O'Hara made a counter opening through the bottom of the sac, and brought it out through the vagina. Part of the placenta could be felt in the bottom of the sac, and the whole sac was syringed out with phenyle.

Patient gradually developed acute delirium, and the temperature rose persistently till the evening of the 11th January, when it reached 108·2°, and the patient died.

Post-mortem examination showed the left broad ligament was dilated into a sac, and contained part of a broken down placenta. There was an incision from the bottom of it into the vagina, passing right between the common iliac arteries. The uterus was of normal size. There was no peritonitis. The rest of the organs were softened and congested.

Case of Hydrothorax, tapped seventeen times.

Under the care of Dr. Embling.

Reported by A. S. Joske, M.B., Resident Physician.

J. B., æt. 35, was admitted into the Alfred Hospital on September 30, 1886. He had been ill four days, with pain in both sides of chest, difficulty of breathing, and slight expectoration of whitish phlegm. Had had good previous health, but had an old sinus over the right tibia, the result of an old compound fracture. He had some dulness over the bases of both lungs, with dry friction sounds and faint moist crepitation. The dulness rapidly increased, and to relieve his dyspnœa, which was urgent, he was aspirated in both sides of the chest, and 88 ozs. of clear fluid were removed.

He was aspirated again on October 12, and 120 ozs. of fluid were removed. The thorax, however, filled again rapidly, and he had to be aspirated at intervals of about ten days, for nearly three months. The fluid always remained clear, the dyspnœa would disappear directly after tapping, and the œdema of the lower extremities would disappear. On December 12, after the sixth tapping, he developed slight emphysema of the lower part of abdomen, but this soon disappeared.

On January 13 a faint mitral murmur was discovered for the first time.

He was aspirated altogether seventeen times up till January 22, and 1446 ozs. of fluid altogether were removed. Then he was transferred to the surgical side for operative interference, but this was not done, beyond regular weekly tappings for four weeks, and on each of these occasions about 20 ozs. of fluid were drawn off.

The treatment he had previously been getting was iodides and counter-irritation, with cod-liver oil and maltine. In January this was changed to iron and maltine, and the fluid seemed not to accumulate, as he was not tapped after the end of February. He was then allowed to get up and go about, and though the dulness of both sides of chest still remained, the dyspnœa did not return. He was discharged on May 27, 1887, and has not since returned to hospital.

Fractured Femur—Multiple Calculi in Kidney and Ureters—Uræmia—Death.

Under the care of Mr. J. T. Rudall.

Reported by A. S. Joske, M.B., Ch B.

Resident Physican.

T. L., æt. 16, was admitted into the Alfred Hospital on April 7th, 1887. He was suffering from a simple fracture of the right femur in its middle third. The fracture united with some shortening, and the patient sat up on 29th of May. He was then suddenly seized with vomiting of some greenish fluid. This occurred after visiting day, and was thought to be in consequence of something given him by friends. Subsequently a succession of convulsive fits occurred. During these fits he would shriek out.

His pupils were greatly dilated; pulse slow and laboured. He had continuous vomiting of all food. On the morning of the 7th of June he had almost total suppression of urine. On a catheter being passed, only a few drops of bloody urine could be drawn off. He was in a nearly unconscious state till his death, on the 8th of June, at 1.30 a.m.

The post-mortem examination showed complete closure of the vesical ends of both ureters by uric-acid calculi. The ureters were greatly dilated, and the calices of both kidneys had a large number of small calculi present in them. The bladder contained but a small quantity of bloody urine.

Australian Medical Journal.

AUGUST 15TH, 1887.

A NEW HEALTH BILL.

Great complaint was made that the Public Health Amendment Act of 1883 was rushed through Parliament, without proper opportunity being given for discussion, without, as well as within, the House. It very soon became apparent that the Act was, in many respects, defective, and the proof of this may already be taken as given, by the circumstance that it has already been felt necessary to bring forward an amending bill, for the drafting of which the Central Board has the credit or the responsibility. It is quite a large measure, so extensive, indeed, both in its bulk and in the alterations proposed, that its passage will be hindered by that circumstance alone. If so many alterations in the original measure are required, it would be better and more convenient to amend it out of existence, and introduce a Consolidating Bill. As things are, the health legislation of the colony is becoming so complicated, that its provisions threaten to get beyond the grasp of those who are expected to act on it. Independently of this circumstance, also, the new Bill has many provisions which are certain to excite opposition, and clear indications of the nature of that opposition have already been given by the local bodies interested in the practical working of the Act. It is probable enough that the feeling roused against the new measure, on the part of the local authorities, is due almost as much to the antagonism, which notoriously exists against the Central Board, as to dislike to some of the proposals for strengthening its hands. The feeling is a general one, that local boards, instead of being advised and guided in the way of well-doing, are apt to be treated after the manner of criminals before a court of petty sessions. Whilst it may be admitted that the Central Board might, with advantage, have greater powers, there is the utmost unwillingness to trust such powers to the Board, as at present constituted. It can hardly be supposed that the local boards are always in the wrong, and that the want of touch between them and the Central Board is owing solely to their remissness, as contrasted with the wisdom and zeal of the central authority. The opposition threatened is probably due also to the rather uncompromising way in which the claims and pretensions of the Board are put forward,

Independently, however, of these difficulties and objections, which will certainly lead to extensive alterations in the Bill, if it is allowed to pass at all, there are points in it, which, from the medical point of view, call for criticism. It is the part of the Bill dealing with infectious diseases and hospitals to which our remarks must at present be confined. Great alterations have been made by the practical abolition of the term "malignant," as applying to a class of such diseases. In the Act of 1883, there were included under it, small-pox, yellow fever, cholera, typhus, and the plague; all others being included under the term "dangerous." The "malignant" diseases, which were practically those not prevalent in Australia, were made subject to provisions about notification and isolation, which did not apply to the others. It is now proposed that the Central Board shall have the power to define whether or not a "dangerous" infectious disease is "malignant" at any time, or in any place, so subjecting any or all to the provisions now applying to a few having special characters. We must contend that this is a very lax mode of procedure. When animals are concerned, it is considered necessary to schedule and define the diseases which require to be dealt with for preventive purposes, and it might be thought that equal exactness is required in the case of human beings. Before such vague powers are given, it is not too much to insist that they should be at the disposal of a body having more pretensions to medical knowledge than the Central Board can possibly be allowed to possess. We cannot believe that the full extent of the change caused, by a slight alteration of words, has been carefully weighed in framing the Bill.

The question of the notification of infectious diseases was raised in 1883, but left in rather an unsatisfactory position. It is certain that there can be no efficient action for preventing the spread of such diseases, without early notification of the occurrence of cases; but if there is to be compulsory notification, some sense of fairness should be shown in bringing it about. But, the following clause (38), can hardly be called either fair or reasonable :—"Whenever any place in, or part of Victoria appears to be affected by any dangerous, infectious, or contagious disease, the Central Board may, by notice published in the *Government Gazette,* require all medical practitioners, deputy registrars, state school teachers, and members of the police force residing in such place or part, to report such occurrence by telegraph or by letter to the Central Board in such form as the Central Board shall prescribe, immediately on such occurrence coming to his or their knowledge. Any person failing to comply with the provisions of this section, shall, unless he prove that he was aware such disease had already been reported, be guilty of an offence against this Act." We have shortened the clause slightly, to make more clear the novelty of its demand. Medical practitioners are summarily classed with the police and other government officers, and as persons who may be compelled, without fee or reward, and under pains and penalties, to put their time and their knowledge at the disposal of the Central Board. This is not the way to get compulsory notification introduced, and we fancy that the profession will insist on some provision of a quite different character being substituted.

Other provisions are so wide-reaching in their application that we can hardly believe that the framers of the Bill could have appreciated the meaning of the terms used. Clause 42 provides that if the owner or occupier of a house neglects to report the occurrence of "any disease, illness, or complaint *attended with eruption or eruptive symptoms,*" he shall be liable to a fine of not more than twenty, and not less than two pounds. This provision is supposed to come into force only when small-pox is declared to be present in Victoria; but, whether then or at any other time, it is too absurd, even to be seriously discussed.

Even worse, in some respects, is the provision in clause 44, that the Governor-in-Council may direct the setting apart of a place "for the reception and treatment of Chinese lepers or any other persons suffer from disease *not necessarily of a contagious or infectious kind,*" and for the removal and detention in quarantine of such persons. The italics in the quotations just given are ours. The fact that the Bill contains such provisions, may be taken as sufficient proof that there has been no excessive amount of thought or consideration given to the wording, by those who framed it, and as showing what need there is for careful watching of its progress, if it ever comes to be seriously discussed in Parliament.

INTERCOLONIAL MEDICAL CONGRESS.

The definite programme of proceedings of the Congress has now been issued. Meetings of special committees will be held every morning at 9 a.m., and the general meetings for business at 3 p.m. On Tuesday, at 1 p.m., the Members will be invited to luncheon by the Mayor at the Town Hall; the inaugural meeting being held afterwards in the Council Chamber. An opening address by His Excellency the Governor will be followed by the President's Address and the Report of the Executive Committee. The first business on Wednesday will be the address in Medicine, sectional meetings following at the University, as on the other days. The address in Surgery will be given on Thursday, and those in Gynæcology and State Medicine on Friday. Arrangements have been made for a visit to the Sewage Farm on Thursday morning, and for Exhibits of various kinds on Friday at 2 p.m. The Chancellor will receive the Members and their friends at a conversazione at the University on Tuesday evening; and they will be received "at home" by Mr. and Mrs. Barr Smith on Wednesday evening; and at Government House on Thursday evening. On Friday evening a dinner will be given by the President and Members of the South Australian branch. Saturday will be given up to excursions, the Members being invited to luncheon on the same day by Sir Thomas Elder, at Birksgate.

These arrangements will, as far as possible, be carried out, but in view of the large numbers of papers to be read, it may be necessary to hold supplementary meetings of sections in the forenoon. There is every reason to expect that the meeting will prove an enjoyable as well as a useful one, and we can once more congratulate the members of the profession in Adelaide on their enterprise and public spirit in initiating the Congress, and on the excellent arrangements made for the comfort and profit of visitors.

Reviews.

DR. ROBSON ROOSE ON GOUT.*

In this little book of 157 pages Dr. Robson discusses, in a manner which is necessarily rather discursive than exhaustive, the various theories as to the nature of gout, its clinical history, its etiology, its irregular manifestations, its relations to hepatic and renal disorders, and its treatment. The author's professed object is to "place before the profession his views as to the nature of gout," and to maintain the doctrine "that functional disorder of the liver underlies the majority of gouty manifestations." This theory is supported by an admirable summary of the facts, chemical, physiological, and experimental, bearing on the sources and modes of production of uric acid in the system; the most important competing theory, viz., that gout is essentially and primarily a tropho-neurosis, is also fully expounded in its various forms. In this connection it may, perhaps, be suggested that pathological theorists have been too prone to pounce upon particular organs or systems as the primary offenders in such diseases as gout, and to ignore the importance of irregularities in the general tissue-change throughout the body. It is at least possible that the main cause of the excess of uric acid, which is on all hands admitted to be the *proximate* cause of gout, may be defective metabolism throughout the body, depending probably on defective activity of the ferments by which, according to Brunton, "the tissues become broken up, and finally oxidised."

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* Gout and its Relations to Diseases of the Liver and Kidneys, by Robson Roose, M.D., F.C.S. London: H. K. Lewis, 136 Gower-street, 1887.

However this may be, Dr. Roose is a firm upholder of the theory that the liver is to blame, and that the nervous symptoms, which are so prominent in gout, are caused "by the action of the *materia peccans* on the nerve-centres." The logical sequence of his conclusions from his premises is not made quite so clear as might be desired, and such value as these conclusions possess is less due to their reasoned character than to the fact which he states—that they are the results of a "somewhat extensive experience of the gouty dyscrasia in its various forms."

As might be expected in the work of a practical physician, the chapter on treatment is the most valuable in the book. The various important questions, as to diet, drink, exercise, and medicinal treatment, are fully and judiciously discussed, due emphasis being laid upon the drawbacks, too apt to be forgotten, attending a largely vegetable diet. On the vexed, and still unsettled question, of the action of colchicum, the author seems to speak somewhat too dogmatically in saying that "this drug has been proved not to increase the elimination of uric acid." Forty years ago the opposite doctrine was held as established by the researches of Chelius, Lewins, and Maclagan (*vide* Christison's Dispensatory, Ed., 1848); endless contradictory results have been obtained since that time; and the most recent researches, those of Mairet and Combemalle, have led to the positive conclusion that "colchicine increases the excretion of uric acid, and diminishes the quantity of uric acid in the blood." It may be the fact, as Brunton suggests, that the discrepancies are due to different observers having experimented with different diets; but in the present state of the question a statement so dogmatic as that quoted above is hardly warranted.

In stating that the mode of action of saline cathartics is still doubtful, the author appears to be unaware of the fact that this question has been conclusively settled by the able researches of Matthew Hay.

The book is written in a clear and interesting style; its mechanical form and general get-up are excellent; and although it has no claim to special originality of any kind, it can be heartily recommended as a thoughtful, readable, and really useful presentation of the best existing knowledge on the subject with which it deals. D. G.

THE AMERICAN INDEX CATALOGUE.*

The seventh volume of this invaluable work of reference has been issued, and the work is making steady progress at the rate of a volume annually. The portion of the alphabet included is that from Insig. to Leghorn., and, as very many of the long topics come under the early letters, it may be presumed that quite half of the undertaking has been accomplished. In the present volume there are 14,688 Author titles, referring to 5987 volumes and 12,372 pamphlets, while under Subject titles there are references to 6371 books and 34,903 journal articles. The seventh volume has further value and interest from the fact that it has prefixed to it a consolidated list of the abbreviations of titles of periodical and collective works used in indexing. This is in fact a very full list of such publications, bearing on medicine and the allied sciences whether now current or long out of circulation. The list extends to about 100 pages, with between 30 and 40 titles in each page. From this fact alone it is evident how extensive is the Library of the Surgeon General, and how laborious the task of preparing this Catalogue. J. J.

Extracts from the Medical Journals.

Removal of a Hairpin from the Pregnant Uterus.

Dr. J. H. Fruitnight reports a case which is of interest, as showing the tolerance of violence on the part of the pregnant uterus, under some conditions. The important lessons suggested are, that the healthy uterus does not readily contract prematurely on its contents, so as to bring about their expulsion, and that when abortion does occur, unless as the result of extreme violence, it should almost be assumed that there has been some pre-disposing condition present, either in the uterus itself or in the ovum. The patient, aged 24, was pregnant about 2½ months, having previously borne two children. Taking the advice of another woman she had used a bent hairpin for the purpose of causing abortion. The curve was about the usual one, but the one limb was 4½ inches long, and the other 1½. She said she had introduced the instrument herself without difficulty, but when she attempted to withdraw it again she could bring it down only to a certain point. After pulling vigorously she became terrified, and desisted when bleeding came on. Dr. Fruitnight tried to remove it by traction, but also failed, and then put the woman under chloroform and brought the hairpin into full view with a bivalve speculum. Powerful traction was then made with a strong pair of uterine forceps, when suddenly the hairpin was released, and came away with the curve straightened out to about a right angle. There was quite a profuse bleeding, which ceased spontaneously in a few hours. The patient was ordered rest in bed, and to take a sixth of a grain of sulphate of morphia every two hours till the pain disappeared. The woman made a good recovery, and more than a month afterwards there was no indication of interference with the course of pregnancy.—*American Journal of Obstetrics*, June 1887.

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* Index Catalogue of the Library of the Surgeon-General's Office. Vol. vii. Washington: Government Printing Office, 1886.

The Treatment of Phthisis.

Several methods have recently been suggested, and more or less carefully tried, of treating phthisis on the antiseptic principle, or at least of using agents which are assumed to be capable of destroying the bacillus of tubercle or lowering its vitality. Prof. Sommerbrodt has recently (*Berl. Klin. Wochenschr.* xxiv., 15, 1887) reported his experience of the use of creosote in the early stages of the disease. The best mode of prescription, he says, is creosote gr. ¼ and balsam of tolu gr. 3, in capsules, which are given in increasing doses up to nine in a day. He has found it well borne, though given for several months; as many as 2000 capsules having been taken by one patient. The effect was seen in increased appetite, and improved general condition. The local conditions underwent a change for the better, and in a series of cases there was considered to be actual cure. Even in laryngeal tuberculosis the creosote had a good effect given internally. The author, of course, does not claim the whole effect as due to the creosote, though his experience has been so encouraging that he strongly recommends further trials.

Dr. O. Fraentzel (*Deutsche Med. Wochenschr.* xiii., 14, 1887) also strongly advises the use of creosote in the following form:—creosoti 13·5, tinct. gent. 30, sp. vin. rect. 250, vini xerens. ad. 1000; the dose being a tablespoonful three times a day in a glass of water. Like Sommerbrodt, he admits that he put his patients under the most favourable general conditions at the same time, and only insists that the creosote had a full share in producing the good effects.

Dr. F. Rosenberg (*Therapeut. Monatshefte* i., 3, 1887) has treated a number of cases with menthol, both inhaled and taken in large doses internally—20 or 25 grains, six times a day, in capsules. The patients quickly got a good appetite; the cough and expectoration lessened, the sweats ceased, and the general condition improved greatly. He remarks that no influence seemed to be exerted on the bacilli in the sputum.

Drs. Bouveret and Péchadre (*Lyon Med.* xviii., 7, 8, 9, 1887) have tried the injection of eucalyptol subcutaneously, with the same idea as Bergeon with his injections of gas into the rectum, viz., that the agent would enter the circulation, and, escaping by the lungs, would kill the bacilli in passing out. In an extensive use of this method of treatment, there was seldom found to be any benefit, only those patients who were not feverish sometimes showing some diminution of expectoration.

The inhalation of antiseptic agents, by means of some inhaler covering the mouth, has gone rather out of vogue recently, but the benefits to be obtained from their use has again been strongly insisted on by Dr. von Brunn (*Allg. Med. Centr. Ztg.*, 41 and 42, 1886). He has given up oral and oro-nasal inhalers, using a small apparatus devised by Feldbausch, consisting of two tubes made of celluloid or metal, which fit into the nostrils, being joined together by a bow, so as to fit on the nose. In this way the instrument can be worn night and day, without inconvenience, after some practice. The medicament used is carbolic acid or creosote, introduced into the tubes on blotting paper.

Is Iodoform a Useful Antiseptic?

This question has been much discussed since Heyn and Rosving published their experiments, which went to show that it has little or no destructive action on bacteria, and even that its use may introduce new dangers on account of the spores of various kinds which may lodge unharmed among it. At the instance of Prof. Bergmann, Dr. De Ruyter, of Berlin (*Archiv. f. Klin. Chir.* xxxv., 1, 1887), has repeated these experiments on a large scale, with results which largely confirm the general conclusions just mentioned. He tried the action of the powdered iodoform on cultures of many bacterial forms on gelatine. Among those tried were the bacilli of anthrax, of mouse septicæmia, of chicken cholera, and malignant œdema, the staphylococcus aureus and albus, the micrococcus prodigiosus, &c. It was done by sprinkling iodoform on the gelatine surface after its inoculation. In two of the bacterial forms there was quite as luxuriant growth as in the control experiments, while in the others there was only slight retardation, which was probably owing simply to the physical action of the powder, or to interference with the free access of air. The frequency with which fungoid growths formed made it probable that the spores of these had actually been present in the iodoform. Solutions of iodoform in ether and absolute alcohol were found to have a much more powerful anti-bacterial action, while those in glycerine and sulphide of carbon had no such effect. Experiments made by inoculating fresh wounds showed that either the powder or the ether and alcohol solution had a distinct effect in inhibiting the action of the kinds of virus tested, probably owing to decomposition of the iodoform, and formation of free iodine or other chemical compounds.

Prof. König (*Therapeut. Monatshefte* i., 4, 1887), while recognising the importance of Heyn and Rosving's investigations, still holds that the value of iodoform, as a dressing, has not been at all disproved by them. He believes that this value consists greatly in its power of hindering secretion from fresh raw surfaces, and that this action makes it indispensable in many cases. If bacteria can live in iodoform, it is clearly necessary to make this itself aseptic, though it has not been shown that such bacteria have not lost their infective power even if alive.

A further blow has been given to the reputation of iodoform, and especially as regards its supposed anti-tuberculous action, by the further experiments of Rosving (*Fortschritte d. Med.* v., 9, 1887), who inoculated the anterior chamber of the eye in rabbits with tubercle particles, which had been intimately mixed with iodoform. Instead of inhibiting the growth of the tubercle, it was found to go on more quickly than where pure unmixed tubercle had been inoculated. Rosving suggests that the iodoform, by irritating the tissues, brings about a condition which is more favourable to the growth of the tubercle.—*Schmidt's Jahrbücher,* No. 6, June 1887. J. J.

University Intelligence.

MELBOURNE UNIVERSITY.

At the meeting of the Council, on the 1st inst., a letter was received from the Faculty of Medicine, forwarding the following resolution in reference to the admission of women students to medical lectures:—"The Faculty of Medicine remains convinced that there is only one method of providing satisfactorily for the medical education of female students, namely, to admit them to the same lectures and practical teaching as are open to male students. Any departure from this method will render it difficult to require from female students that standard of knowledge which is exacted from male students. It must be remembered also that when female students become qualified practitioners they must constantly meet practitioners of the other sex in consultation."

In the course of the discussion which arose there was considerable diversity of opinion, but a majority being in favour of facilities being given to female students, in the way of providing separate instruction where it seemed to be desirable, it was resolved to appoint a committee of five members of the Council to confer with five members of the Faculty, and to prepare a joint report as to a practicable scheme for carrying out the resolution of the Council relative to the medical education of women. It was agreed that the representatives of the Council on the joint committee should be:—The Chancellor, the Rev. Dr. Bromby, Mr. Ellery, Mr. MacFarland and Sir Archibald Michie.

A letter was received from the Medical Faculty transmitting applications from two medical students for recognition of their attendance on the surgical practice of the Brisbane Hospital. The Faculty also reported that the Brisbane Hospital had not yet been recognised by the University of Melbourne, and had made no formal application for such recognition. It was resolved that the students be informed that the Brisbane Hospital must make application to the University for recognition, and, at the same time, forward the requisite particulars for the guidance of the Council.

A report was received from the Professorial Board, with reference to Exhibitions, in which it was recommended that there should be six exhibitions of £20 each, in the second, third, and fourth years medicine (two in each year), instead of three of £30 each (one in each year), as at present. The proposed new regulations would read as follows:—"Two exhibitions may be awarded at the second honour examination in medicine, one for junior descriptive and surgical anatomy, and one for physiological chemistry and histology, and materia medica, medical botany, and elementary therapeutics."

"Two exhibitions may be awarded at the third honour examination in medicine, one for senior descriptive and surgical anatomy, and one for general anatomy and physiology."

"Two exhibitions may be awarded at the fourth honour examination in medicine, one for regional and applied anatomy and pathology, and one for therapeutics, dietetics and hygiene."

PRESENTATION OF AN ADDRESS TO THE CHANCELLOR.

A meeting of members of the medical profession was held at the Athenæum on the 21st ult., to present an address of congratulation to Dr. Brownless, upon the occasion of his election to the office of Chancellor of the University of Melbourne.

Dr. **Neild**, who had specially interested himself in arranging for the presentation, was called on to take the chair.

The Address, which was engrossed, and strongly and handsomely bound in album form, read as follows :—

"To Anthony Colling Brownless, M.D., F.R.C.S. Eng., &c.

> "We, members of the medical profession in Victoria, offer you our warm congratulations upon the well-merited honour, recently conferred upon you, of being elected to the office of Chancellor of the University of Melbourne.
>
> "We feel that this act of the Council is not only a just acknowledgement of the valuable services you have during thirty-two years rendered to the University, and especially to the Medical School, but it is a compliment of an unprecedented kind tendered to the brotherhood of medicine.
>
> "May you long enjoy the honour and satisfaction which its possession must communicate to you."

The Chairman referred to the prominent position which Dr. Brownless had taken in the profession from the time of his arrival in the Colony, and especially insisted on the great work which he had done in connection with the establishment of the Medical School, as well as in furthering its progress and well-being. Dr. Neild added that he was sure that those who had signed the Address represented the common feeling of the profession.

Dr. Brownless said that he was now nearly fifty-six years a member of the medical profession, and that though he had been the recipient of many honours, the congratulations of his brethren, on his elevation to the Chancellorship, had caused a thrill of pleasure in his heart which no words could describe. Amongst others, he had received most cordial congratulations from the two most distinguished leaders in medicine and surgery in England—Sir George Burrows, Bart. and Sir James Paget, Bart. Sir James Paget, in his letter, said :—" Certainly nothing of the kind could be more gratifying to yourself or to your profession, for you have won for both a rare honour." The value of the Address had been greatly enhanced by the kind and flattering manner in which Dr. Neild, on behalf of the medical profession, had spoken of him, and he thanked them and the whole of his professional brethren in Victoria for the confidence they had reposed in him, and for the great kindness, respect, and courtesy which he had received from them during his thirty-five years' residence in this Colony.

The health of Dr. Brownless was then drunk by the company, and the Chancellor, having proposed the healths of Dr. Campbell, as being the oldest medical practitioner in the Colony, and of Dr. Neild, the party broke up.

The University Reserve.

A number of gentlemen, representing various interests, waited on the Minister of Lands, in reference to the disposal of the ten acres of land within the University Reserve, and adjacent to the Women's Hospital.

Dr. Brownless, the Chancellor, presented a claim by the University Council for the whole ten acres, two of which would be required for the extension of the Medical School. His own view was that a Clinical Hospital should be erected on the remainder of the area.

Professor McCoy and Dr. **Morrison** supported the claim, the latter stating that the University Council had no intention of using it for hospital purposes.

Mr. **Marks** urged that the land should be given to the Melbourne Hospital Committee, which desired to work along with the University. It was necessary to remove the Hospital, and few sites were now available.

Mr. **Laurens**, M.L.A., spoke for the residents of Carlton, who objected, he said, to another hospital being built in their district.

Mr. **Pearson**, on behalf of the Education and Defence Departments, urged that the land should be given to them, for the erection thereon of a training college for teachers, and a cadet college, which he contended ought to be in close relation with the University.

Mr. Dow said that care would be taken not to interfere with the Medical School, and its claim for two acres would be considered. He thought the solution of the difficulty which would meet with the least objection would be to grant the land for a training college for teachers and a cadet college. That, in fact, would be most in unison with the character of the University itself. He did not think it desirable that the matter should be held in suspense any longer, and it should be considered that the matter was settled in that way.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At the meeting of the Committee on the 26th ult., it was reported that the President, Vice-President, and other office-bearers had been elected without opposition.

The Secretary said that the question had arisen as to whether a licence from a college, or a degree from the Brussels University was a sufficient qualification for a candidate for appointment as an honorary officer of the hospital. The rules said that only members of colleges or persons holding degrees from foreign universities recognised by the Melbourne University, were to be considered qualified, besides those holding the usual degrees of the universities of Great Britain.

Mr. Gregory, who was a member of the sub-committee which drew up the rules, said that it was intended that licentiates were to be excluded. He moved—"That the candidate in this case be informed that licentiate was not sufficient qualification."

It was agreed, however, that the matter should be referred to the Qualifications Committee.

It was decided to refer the question of the degree of the Brussels University to the Council of the Melbourne University, with a view to ascertain whether this was one of the foreign universities recognised by it.

The following motions were unanimously agreed to:—(1) "That the resident medical officers be notified that in future any officer granted leave of absence, on any account whatever, shall provide a substitute free of charge to the hospital." (2) "That the reports of particulars of operations performed by the different members of the staff of the hospital, which were laid before the meeting of the committee, be referred for the future to the medical staff, with a request that they will name which amongst them are capital operations."

At the meeting of the Elections Committee on the 2nd inst., the following nominations were received for positions on the honorary staff: Physicians to the in-patients—Drs. J. Williams, J. W. Springthorpe, J. R. M'Inerney, J. Jamieson, P. Moloney, J. Fulton, G. Le Fevre, V. Browne, and J. A. Kennison. Surgeons to the in-patients—Messrs. E. M. James, C. S. Ryan, R. A. Stirling, T. M. Girdlestone, T. N. Fitzgerald, and J. G. Beaney. Physicians to the out-patients—Drs. C. Bage, G. Annand, D. Grant, J. De Burgh Griffith, and Chas. E. Gray. Surgeons to the out-patients—Messrs. F. D. Bird, J. H. Webb, J. T. Brett, G. A. Syme, J. P. Ryan, and Dr. Wm. Moore. There was doubt as to the sufficiency of the nomination of Dr. Fulton and Dr. Griffith, who are both absent from the colony. The difficulty was merely a technical one, and will be settled before the date of the election, on the 18th inst.

At the meeting of the Committee on the 9th inst., it was reported that nominations, as already published, had been received for the election of the honorary staff.

As there were just sufficient nominations for the positions on the staff of physicians attending the out-patients, Drs. C. Bage, G.

Annand, D. Grant, C. E. Gray, and J. De Burgh Griffith were declared duly elected.

It was stated that counsel's opinion as to the validity of the nominations of Dr. Fulton, as a member for the physicians to attend the in-patients, and Dr. Griffith for the out-patients, who were absent from the colony, was favourable to those gentlemen.

In reply to a question which had arisen, as to whether a gentleman holding a degree from the Brussels University was qualified to serve the institution, a letter was received from the registrar of the Melbourne University, stating that the Brussels University was not one of the foreign institutions recognised by it. It was therefore decided that the gentleman holding such degree was not qualified to act on the staff of the hospital.

ALFRED HOSPITAL.

At the meeting of the Committee on the 22nd ult., a letter was received from Dr. Jamieson, tendering his resignation of the position of honorary physician, on the ground that he was a candidate for a similar position at the Melbourne Hospital. The resignation was accepted with regret.

A report from Dr. Joske, resident physician, showed that from November 1886, till June 1887, 292 persons suffering from typhoid fever had been treated in the hospital. During that time the death-rate had been 13·01.

The Annual Meeting of the Subscribers to the Hospital was held on the 29th ult. The report of the managers showed that the number of patients under treatment during the year 1886–87, had been:—In-patients, 1727; out-patients, 2041; casualties, 640; total, 4408. The number of prescriptions dispensed during the year has been 37,168, showing an increase of 2521 on the previous year. The daily average of in-patients (exclusive of those in the pay wards) has risen from 114·6 last year, to 141·7. This extraordinary increase is in part due to the Camp Hospital, and also to the fact that the Linay Pavilion was only opened for patients towards the close of the last financial year. The large increase in the cost of drugs and maintenance generally is thus accounted for. The managers are pleased to state that the Government have increased the grant-in-aid to the hospital from £3250 to £4000. The pay wards were opened for the reception of patients on 2nd August last, and have, up to the present time, been fairly well patronised. Of the 118 patients admitted since the opening, 85 were discharged, relieved or cured, and 19 died, leaving 14 inmates on the 30th June, 1887. Twenty-five of the foregoing patients occupied class A wards (*i.e.* private rooms), and 88 patients class B. The former paid £4 4s., and the latter £2 6s. a week, including in each case £1 1s. a week for medical attendance. The managers have to record with deep regret the removal by death of Dr. John Blair, whose connection with the hospital dates from its inception, and to whose valuable services, as chairman of the medical committee, much of the success of the hospital may be attributed. Owing to the exceptionally severe outbreak of typhoid fever that occurred early in the year, the Central Board of Health requested the co-operation of the managers in placing at its disposal a portion of the hospital grounds for the erection of a fever camp, and supplying the needful medical attendance and nurses. The tents, six in number, and containing in all 28 beds, were opened on 18th February, and closed 26th May. During that time 69 patients (57 male and 12 female) were treated, of whom 49 were discharged after recovery, 12 transferred to the hospital wards, and 8 died. The managers consider the results most gratifying, and are pleased to note the fact that the Central Board has placed on record its appreciation of the services rendered in the emergency by the medical and nursing staff of the hospital.

The statement of accounts showed an expenditure of £12,427 1s. 5d., and a debit balance of £3435 15s. 8d.

The retiring managers were re-elected.

At the meeting of the Committee on the 5th inst., a letter was received from Dr. O'Hara, suggesting the starting of a school of surgery at the Alfred Hospital for fifth year medical students. He asked for the views of the managers on the matter. Upon discussion, the following resolution was carried, on the motion of Mr. Thomson :—"That the managers think that the time has now arrived when a clinical school should be established in connection with the hospital, and request the honorary medical staff to submit a report thereon for the consideration of the managers." A report from a sub-committee, signed by Dr. Adam and Mr. Rudall, and confirmed by the chairman of the honorary medical staff (Dr. Embling), recommended that a department for the special treatment of diseases peculiar to women should be instituted in the hospital for both in and out patients. It was resolved to defer the consideration of the report for four weeks.

EYE AND EAR HOSPITAL.

The Annual Meeting of the Contributors was held on the 28th ult. The report, which was for a period of eighteen months, ending 30th June, 1887, stating that during that time, the number of patients treated has been as follows :—In-patients, 653 ; out-patients, 18,542 ; new cases, 4153 ; and total attendances, 22,695. The number of operations amounted to 963. The medical staff, having brought under the notice of the committee the desirability of appointing a resident surgeon, the committee resolved that the appointment should be made, and on the first occasion given to Dr. Kenny, and since he has entered on his duties, the work that has fallen on the resident-surgeon has amply shown the necessity of the appointment. The income for the eighteen months amounts to £3675 14s. 10d., derived from the following sources :—Government grant £900 ; subscriptions, £771 8s. ; grants by municipalities, £558 1s. ; bequests, £413 19s. 4d. ; endowment fund, £180 15s. 6d. ; registration fees, £323 12s. 6d. ; hospital sunday fund, £521 17s. 6d.

Dr. W. L. Mullen has been elected resident surgeon, in place of Dr. Kenny, resigned.

AUSTIN HOSPITAL.

The Annual Meeting was held on the 21st ult. The fifth annual report of the committee showed that during the year ending the 30th of June last, the usefulness of the institution had been availed of to the fullest capacity. There had been 57 admissions, including 3 re-admissions. Of this number 25 were cancer cases. On the 30th of June there were 70 patients remaining in the hospital. During the year there had been 51 deaths, 21 of those being cancer cases, and 12 patients left to go to their friends. The general wards had been kept almost constantly filled during the year. The receipts for the year were £3452, and the expenditure £2498, and there was a balance at the bank of £1929, of which £1800 was on deposit. The endowment fund stood at £5506, and the building fund at £759. Not infrequently, intending patients had died while waiting for a vacancy in the hospital, and the necessity of extending the hospital was apparent, but the committee could not see their way to recommend an extension, in view of the small sum to the credit of the building account.

Vital Statistics.

The report of the Government Statist on the vital statistics of Melbourne and suburbs, for June 1887, shows that the births of 1250 children, viz., 647 boys and 603 girls, were registered during the month. The deaths registered numbered 571, viz., 312 of males, and 259 of females. To every 1000 of the population of the district, the proportion of births was 3·36, and of deaths 1·54.

One hundred and three deaths occurred in public institutions.

The number of children under one year who died was 132, the total number under five years being 189.

In June, as compared with the previous month, deaths from specific febrile or zymotic diseases decreased from 83 to 38, those from constitutional diseases from 128 to 110, and those from local diseases from 317 to 296. Under the zymotic head, deaths from diphtheria fell from 10 to 6, those from typhoid fever from 40 to 15, and those from diarrhœal diseases from 21 to 7. Under the constitutional head, deaths from cancer fell from 29 to 18. Under the local head, deaths from throat and chest affections fell from 102 to 92. Only 5 deaths of child-bearing women occurred during the month, as against 16 in May. If these numbers be compared with the births registered during the same months, it will follow that one death of a mother took place to every 250 children born alive in June, as against 1 to every 79 such children in the previous month.

Correspondence.

ETIOLOGY OF PUERPERAL FEVER.

To the Editor of the Australian Medical Journal.

Sir,—In connection with Dr. Hooper's interesting paper read before the Medical Society last month, I should like to refer to a cause of puerperal septicæmia, which exists in private practice, at any rate in the country; this is the contamination of the fingers of the nurse by meat, fowls, &c., which she may be preparing for cooking shortly before attending upon the patient.

I have only had two genuine cases of puerperal fever in this district during twelve years, both of which were attended in the first instance by a midwife only, and in one, the above cause was the only one I could detect. The other, to which I was called in consultation recently, evidently arose from a practice equally reprehensible, viz., attending and delivering a second patient during the course of attendance upon a first; in this case the nurse generally leaves the second patient immediately after delivery to the care of others, or sometimes continues the attendance on two, or even three women during the same time. In the instance to which I refer, the first patient was suffering from phlebitis (of varicose veins of the legs) following delivery, but slowly recovered; the second patient, who was attended by the same nurse during delivery only, contracted puerperal fever in a very severe form, and died in ten days.

It would be well to caution all midwives who make digital examinations to abstain altogether from cooking operations, and to restrict themselves to one case at a time.

I am, yours faithfully,

Charles Smith.

Casterton, August 1st, 1887.

Several cases of small-pox are reported as having occurred at Port Darwin, all those affected, so far, being Chinamen. This announcement gives strong confirmation of the suggestion offered in the *Journal* last month, that the man Alexander, who brought the disease to Sydney, might have caught it when the *Port Victor*, steamer, called in at Port Darwin, where he went ashore. The outbreak at Sydney seems to have been cut short by the vigorous action of the health authorities.

Local Subjects.

Medical Board of Victoria.—The following gentlemen have registered their qualifications:—William Phelps, Melbourne, M.R.C.S. Eng. 1876, L.S.A. Lond. 1875; Henry Alexander Lepthairia Pope, Corowa, N.S.W., M.R.C.S. Eng. 1886, L.S.A. Lond. 1886; Francis Joseph Keyes, Nathalia, M.D. et Ch. M. R. Univ. Irel. 1885; Charles Fetherstonhaugh, Colac, M.B. 1875, Ch. M. 1876, Dublin L. et L. Mid. R.C.S. Irel. 1876. Additional qualifications registered:—No. 1058, Frederic D. Bird, Melbourne, Ch. B. 1884, Ch. M. 1886, Melb.; No. 1009, George A. Syme, Brighton, F.R.C.S. Eng. 1885. Names of deceased medical practitioners ordered to be erased from the Register: No. 736, George T. Teague, M.B. Melb.; No. 917, John W. Phillips, M.B. Melb., &c. A letter, in accordance with section 7 of the Statute, having been sent to the last-known address of each of the undermentioned persons, and no answer having been returned to such letter within the period of six months from the sending thereof, their names have been erased from the Register accordingly:—No. 622, Frederick Wilkinson, M.R.C.S. Eng.; No. 752, John Tuck, M.R.C.S. Eng., &c.; No. 688, Joseph N. S. Shrapnel, M.R.C.S. Eng., &c.; No. 707, Joseph H. Rockett, M.D. Edin., &c.; No. 954, William H. Page, L.R.C.P. Lond., &c.; No. 840, George R. Lloyd, L.R.C.P. Edin., &c.; No. 598, Thos. Lang, L.R.C.S. Edin.; No. 685, Thomas H. Gillman, M.D. Q. Univ. Irel., &c.; No. 811, Edward H. B. Barker, M.B. Melb; No. 572, Francis D. Bullen, L.R.C.P. Edin., &c.; No. 876, Charles E. Wyer, F.R.C.S. Edin., &c.

Public Vaccinators.—The following appointments have been made:—Bendoc—Henry Nichol, M.R.C.S.; Heathcote—Henry Bolton Clark, M.R.C.S., *vice* Charles Robinson, M.R.C.S., who has left the district; Tallangatta—John Hugh Mackenzie, F.R.C.S.E.

Health Officers.—The following appointments have been confirmed:—Shire of Wimmera—William Chisholm Ross, M.B., for the sub-district of Warracknabeal, *vice* W. J. Carroll, L.R.C.S., resigned; Shire of St. Arnaud—William Chisholm Ross, M.B., for Warracknabeal District, *vice* W. J. Carroll, L.R.C.S., resigned; Shire of Strathfieldsaye, Edwin Hinchcliff, M.D., *vice* James D. Boyd, M.D., resigned; Shire of Huntly—Oliver Grenville Taaffe, L.R.C.P., *vice* James Boyd, M.D., resigned; Borough of Ararat—James Smeal, L.F.P.S., *vice* James C. Weld, L.K.Q.C.P., resigned; Port of Warrnambool—Thomas Falkner Fleetwood, M.B., F.R.C.S.I.

Victorian Militia.—Medical Staff:—John Sampson Levis, M.D., Fleet Surgeon, Retired List, Royal Navy, has been placed on the fixed establishment, and Richard H. J. Fetherston, M.B., and Eugene W. Anderson, M.B., on the unattached list, as surgeons on probation with the relative rank of captain.

On the 30th ult., the Secretary of the Pharmacy Board took action in the District Court, against the Mutual Store for a breach of the Pharmacy Act, in carrying on business as a chemist and druggist, not being registered as such. A fine of £1, with £5 5s. costs was inflicted. The magistrates were asked to state a case for the Supreme Court.

The report of the inspector of lunatic asylums (Dr. T. T. Dick) on the state and condition of the lunatic asylums and lunacy wards in the colony, for the year ended 31st December, 1886, has been issued. It appears that at the end of the year the total number of registered insane in the colony of Victoria was 3380; the number at the beginning of the year was 3234, an increase of 146 having thus taken place in the twelve months. There were 572 patients admitted into the asylums during the year for the first time, and 97 were re-admitted, making altogether 669—370 men and 299 women. The admissions in the preceding year were less by 54, or 615 in all; 89 of those admitted in 1886 had suffered once, 25 twice, 6 thrice, 3 four times, and 1 five times, from previous attacks of insanity. The whole number of patients received into the asylums, from the time they were first established in 1848 till the end of 1886, amounted to 17,016. 31·80 per cent. of these recovered, 4·31 per cent. were discharged relieved, 19·65 per cent. were discharged not improved, 24·39 per cent. died in the asylums, 1·11 per cent. died while absent on probation, and 18·74 per cent. still remain on the asylum books. During the year there were discharged from the books 524 persons, of whom 243 had recovered, 10 had improved, 72 had not improved, 188 had died in the asylums, and 11 had died whilst on probation. The number of patients discharged recovered was 243. This gives a proportion of 40·84 per cent. on the admissions and re-admissions, after excluding the transfers and escaped patients re-taken, a result which does not bear favourable comparison with the average of recoveries, 43·11 per cent. since 1868. The total number of deaths in the five asylums during the year was 188, and of the 468 patients allowed out on probation 11 died, making altogether 199 deaths as against 223 the preceding year. The accommodation provided in the lunatic asylums is insufficient, the excess of inmates amounting to 192. To meet the overcrowding now in existence additional buildings have been asked for to accommodate 250 men and 250 women. The total expenditure of the asylums for the year was £101,504 3s. 5d. Of this sum £97,276 was spent in maintenance of patients; £2550 11s. 2d. in general expenses, inclusive of cost of central office and the official visitation of the asylums; £1407 7s. 3d. was paid in connection with the committal of lunatics to the various establishments; and £270 5s. for maintenance in the lunacy wards. The collections amounted to £15,887 18s. 10d., and of this sum £9442 was contributed for the maintenance of patients by their relatives, friends, or guardians. The cost of maintenance has been at the rate of 10s. 0½d. per week.

At the meeting of the Central Board of Health on the 12th inst., the report of Inspector Butler on the manufacture of flock beds was discussed. It was decided to ask Government to insert a clause in the Amended Public Health Bill rendering it compulsory that all rags should be subject to washing by steam or hot water before being converted into flock.

The annual report of the Central Board of Health has just appeared. It is urged that amendments of the Public Health Act are needed to strengthen the hands of the Central Board, and the local boards of health, and that the Central Board should be empowered to take action where local boards fail to prosecute offenders against the public health. Only 15 out of 184 local boards of health took steps last year to prevent the adulteration of food.

Vaccination work has been satisfactorily performed throughout the colony generally. The total number of children registered as successfully vaccinated during the year 1886 was 21,506; the births for the same period having been 30,824; 2748 infants died within the first six months, and, if deducted from the total births, the average of children vaccinated in proportion to births is 76·59 per 100.

On the general health of the colony, the Central Board report that, except for typhoid fever, which has been very prevalent and unusually fatal (522 deaths), the health of the colony has been good. The death rate of the colony last year was 14·9, as against 14·73 for 1885. The total deaths, 14,952, are made up of 8575 males and 6377 females. Exclusive of diphtheritic croup, 121 deaths occurred last year from diphtheria, and 209 from whooping-cough. Specific febrile or zymotic diseases of all kinds resulted in 2278 deaths during 1886, and of these very nearly half (1127) were caused by dysentery, diarrhœa, and choleraic diarrhœa.

In conclusion, it is claimed that Parliament should give extended powers to local boards, and to the central authority to compel notification of infectious diseases, and to remove technical difficulties by which the administration of the law is at present impeded.

BIRTHS.

Andrews.—On the 17th ult., at Wellington-parade, East Melbourne, the wife of William Andrews, M.B., Ch. M., of a son.

Fishbourne.—On the 28th ult., at St. Aidans, Moonee Ponds, the wife of Dr. Fishbourne, of a son.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in Pamphlet form by communicating with the Publishers before the issue of the *Journal.*

THE

Australian Medical Journal

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THE PRESIDENT'S ADDRESS.

Delivered at the Intercolonial Medical Congress, held at Adelaide.

By Joseph Verco, M.D. London.

Joint Lecturer on Medicine at the Adelaide University.

Physician to the Adelaide Hospital.

PROBLEMS AND AIMS OF AUSTRALIAN MEDICINE.

My first pleasure to-day is to thank the Intercolonial Medical Congress for the honour of my election as President. The history of our meeting has been told by our General Secretary (Dr. Poulton), so that no words of mine are needed to lay this matter before you. It may be easily believed that when this Congress—the first of its kind in the Australian Colonies—was proposed, some misgivings were entertained as to its success; but the distinguished patronage of His Excellency, so readily granted, and the patronage of all the Governors of the Australian Colonies, secured by his aid, banished immediate all fear of failure. And when the various Medical Societies and the leading professional men in the sister colonies gave early and hearty support to the movement, we had but to proceed with such arrangement of details that the greatest good to the greatest number might accrue.

Such a large gathering as this of busy men—some from great distances—testifies that our Congress is neither premature in time, puerile in its intentions, nor petty in its anticipated results; and we do not feel the slightest diffidence in assuming at this early period the mantle of the prophet, and predicting to those anticipations a large measure of fulfilment.

As my audience to-day consists largely of the Congress itself, it can scarcely be necessary for me to justify its existence, or show its advantages. Our roll of members to the number of 155 is in itself a sufficient vindication, and furnishes 155 witnesses in evidence of its presumed advantages.

We need only direct our eyes to the old world, where similar gatherings have become a recognised institution, and see what vast proportions they have already assumed, to form some estimate of their real or supposed value. The Seventh Session of the International Medical Congress, held in London in 1881, had a register of nearly 3200 members, congregated from every country in the continent of Europe, from North and South America, from the Cape of Good Hope, from the eastern coast of Asia, and to the number of a score from Australia and Tasmania. The distance travelled by those Australians and Tasmanians might be used as a strong argument in favour of the International Congress, but is doubly strong on the side of an Intercolonial meeting. The long voyage to Europe, even though now contracted within the space of a month, is an absolute barrier to any but the most limited participation by us in an International Congress, for how few, even for such a pleasure, could arrange a three months' absence from duty.

But the thousands of miles which separate us from the old world, and preclude a personal intercourse with our medical brethren in the International Congress, create a distinct need for general meetings amongst ourselves. Our continent is not only the antipodes of Europe, but to some extent its antithesis; it is not only isolated as much almost as distance can isolate, but it is, in many of its essential features, a different sort of world. We live, we study, we practice amid circumstances very unlike those of Europe, and special to ourselves, and which, therefore, demand a special adaptation on our part. And while we could never afford to dispense with the vast stores of medical knowledge which come to us across the seas, or disregard the latest results of that delicate and elaborate research, which the very nature of things has hitherto prohibited among ourselves, we can as ill afford to neglect the special recognition of our own surroundings, or the application of that borrowed knowledge, whether extensive or intensive, to our peculiar colonial conditions. And that this special recognition may be full, this adaptation perfect, we need conference. Without doubt, many problems can be and must be solved far more satisfactorily in Europe than here. To enter into competition is to court defeat, for neither the wealth of material, the special apparatus, nor the otherwise disengaged labour are to be found among us. But on the other hand, it is beyond question that much ought not and cannot be done for us; we have a special field for interesting research, special experiences to embrace, special difficulties to overcome, and to help and fit one another in this work we need conference.

Let me briefly point out some of these circumstances which are worthy of our notice, and which demand our mutual attention.

Coming as our enterprising forefathers did, a three or four months' voyage over a disinfecting sea, they left many of the terrible scourges of humanity behind. The plagues of the olden time, and of the new, are largely only names and phantoms among us. Hydrophobia, the sweating sickness, relapsing fever, typhus, the cholera, have never from their shrivelled lips breathed pestilence and death over our fair land. Now and again a foul form is seen prowling at the doors; the people are anxiously uneasy at the threatening danger. But, hitherto, the monster has been strangled upon the threshold. I ask, is not the heritage we enjoy in our freedom from these plagues a special boon? Does it not involve, in common prudence, a special duty, a special vigilance, and since our communication with the old world has become more rapid, and hence the liability to the importation of infection increased, and our intercommunication is more extensive and more speedy, and hence the distribution of infection greatly facilitated, is there not special need for concerted intercolonial action, for discussion amongst ourselves of such subjects as federal quarantine? And how is this emphasised by the virulence and wildfire spread which characterise infectious diseases in tropical and sub-tropical regions, and still more, by the fact, that it is in the domain of preventive medicine that the grandest victories of late years have been gained, and if I can read the times aright, it is in the department of preventive State medicine that the largest, if not the most brilliant, triumphs will yet be won.

Then again, is it not generally recognised that we have diseases in our land, some unfortunately too common, which in Europe are comparative rarities? It is scarcely necessary to mention them in this company. There is hydatid disease. Do we not meet with it at every turn? Have we not to keep it in mind in our diagnosis of every tumour, external or internal, every collection of fluid, every central nervous derangement, every obstinate cough, every hæmoptysis, however trivial? Who has not been surprised by the unexpected apparition of these parasites? Our experience of this disease is probably a hundred times more extensive than that of our European brethren. Here, then, is a special subject. To be honest with our patient we must study it thoroughly. To the truth-seeker here is ample opportunity. We should be teachers of the Antipodes in this department rather than learners, and we are proud that there are some among us who are attaining this position.

Whence comes pterygium? In England it is a visitor from the tropics. In Australia it has its home. Here it is born and grows to grand proportions. What are its antecedents? How is it begotten? What is its mode of life? Thousands of instances are to hand. Watch them! Learn and teach the truth! Go up North, into certain districts, at particular seasons, and you will find a complaint called "Barcoo." What is it? A British physician never saw a case. Many a one has never even heard of or read the name. Most know nothing about it. Why? Because we have not yet taken advantage of our opportunities to properly investigate and describe. Here is a complaint whose natural history is unknown, or at least, unpublished.

What an interesting field of observation has been opened up in connection with filaria disease. The story of its elucidation, with which the names of Bancroft of Brisbane, and Manson of Amoy, are inseparably associated, reads more like fiction than fact, tracing to the insignificant mosquito, a number of serious tropical diseases, and grouping them, despite their diverse forms, into one natural order. Is it credible that the mosquito is the only insect agent in our various obscure complaints, or that the Amoy mosquito is the only offender of its kind? Who will be the Bancroft of other filariæ, the Manson of the next mosquito malady?

But, again, what an area for survey is opened up in the modification of diseases which are common to the old world and the new. That the types are altered who will deny? That with an identity of disease there should not of necessity be wide variations who can imagine?

Consider the difference between the climate of England, and that of any of our Australian Colonies, from Queensland, in the tropics of the north, to Victoria in the south—the humidity of Britain and the aridity of Central Australia. Contrast the millions of population there, crowded within a few thousand square miles, with our three millions of people scattered over as many millions of miles. Compare the social state, with its destitution there, where poverty means disease and death, with the comparative plenty here, where poverty, even when present, means but little more than inconvenience. Does anyone ask for evidence that these causes *do* work? I have measured 300 South Australian immigrants from the old world. They stand 5 ft. 7·13 in., and weigh 146·58 lb. I have contrasted with them, 250 South Australians born in this colony. They average 5 ft. 8·21 in., and weigh 146·42 lb. Our native population are therefore exactly an inch taller than their forefathers, and within the fraction of a pound the same weight. What is the significance of these facts? That our southern climate, our social circumstances, our mode of life, are altering the physical constitution of the healthy man, of the growing child, and giving him a taller and more slender form. Whether this be a development or a degeneration, I will not say; but it is this—an evidence of the modifying influences, which are at work upon our material economy either for good or for ill. And those same surroundings which, in a single generation, can add one inch to our stature, must probably operate in altering the incidence, the prevalence, the manifestation of disease.

Our South Australian statistics, for example, covering a period of fourteen years, show that phthisis is less than one-half as common here as in England. Is it exactly similar to that of Great Britain? What is the comparative predisposition of our native population to this complaint? What may we expect in the next generation? What are those influences which are so steadily effecting the extermination of our aboriginal races? Is our rheumatic fever the fac-simile of what we studied in the hospitals of London, Edinburgh, and Dublin? Do we get the pericardial friction rubs with the same frequency or the same intensity, and if not, why not?

Again, we live in a *new* country. In the old there is scarcely a locality, high or low, whose meteorology has not been thoroughly worked up and criticised in reference to its suitability for a health resort; scarcely a spring the chemical composition of which has not been examined with a view to its use as a mineral water; scarcely a plant of any note whose physiological properties have not been investigated and its medicinal virtues tested, not merely by the wise women of the villages, but by expert pharmacologists of the schools. Here there is a bewildering profusion of novelty and diversity, courting our curiosity and inviting our labour. We cannot send our invalids to Madeira, or the South of France, or Davos Platz. But have we not, between the snow-clad mountains of New Zealand or New South Wales and the scorching tablelands of the interior, variety enough to meet all our requirements, were we possessed of information sufficiently definite to warrant advice and action? We cannot utilise the thermal springs of the Continent of Europe for hydrotherapeutic purposes. We can scarcely afford for our patients the natural mineral waters that have to be bottled 10,000 miles away, for any but temporary use. But have we no thermal springs, no mineral waters of our own? This is the very complaint from which our country suffers. The streams which gush from our artesian bores, are they not thermal enough? The springs which rise spontaneously in the North, are they not mineral enough? They are so impregnated with saline ingredients, so brackish that they destroy rather than nourish vegetation, the very cattle cannot drink them; but yet our technical knowledge of these springs is so meagre, more especially of those most accessible, that we are unable to employ them, and humanity lives in misery or dies prematurely, whilst relief and life are wasting in the sands. We read accounts, we hear the experiences, half amusing and half pitiful, of the physical troubles endured by men who are compelled to drink these nauseous waters, how they are worked by them *ad deliquum*, how they break out in boils and blisters, how they swell until they can barely crawl into the hospital. It requires but little reflection to perceive in these very troubles the curative treatment for various forms of disease. Could we send our sufferers into those regions, and induce these consequences in a measured form, we should have a means of relief. But we must know more that is definite and decided before we can act with assurance, and therefore act at all.

We have an indigenous flora, largely peculiar to Australia. What use has been made of it medicinally? Some, but not enough. We use the derivatives of eucalyptus, the redgum, and a few others. Here and there a worker records some experiments or some experiences. But whole forests are yet unexplored ready to yield us, shall we prophesy, better antiperiodics than quinine, better anæsthetics than cocaine, better stimulants for heart and cord than digitalis or strychnine. These poisonous herbs of which we read now and again as having proved so deleterious to stock, do not their baneful properties evidence a physiological action upon the animal economy, which we only require to understand and to control by fixed principles and regulated doses, so as to transform the curse of the cattle into a blessing to mankind? From these noxious plants we may derive our substitutes or antidotes for belladonna, convallaria, or opium, &c. Let us believe these worthless weeds were given to amplify our *materia medica.*

Look, again, at the different conditions under which our work is performed. First, in the city. Here we have no special class of pure consultants such as are found in London, but every man is more or less a general practitioner, and on the other hand, each one is in turn called in to consult, and that in all departments of medicine, surgery, &c. Further, even our largest cities are not so large but every man's practice overlaps every other man's, and all come into a kind of competition. Moreover, there is a freedom of intercourse, a circulation of news, a canvass and criticism of medical work and professional men, such as is an impossibility in the larger and less democratic cities of Great Britain. Do not these special circumstances entail special responsibilities in relation to our patients, to each other, and to all codes of medical ethics? It becomes quite a question whether it is wise or right to bind ourselves absolutely by those regulations which may be needful and best in a country where the surroundings are different, and whether on some points we should not be even more stringent.

Notice, too, our peculiar position as regards a legal standing. In some of the colonies there is practically no Medical Act. This, of necessity, gives us a relation to the State and to unqualified practice very dissimilar to that in which a practitioner in Great Britain stands, and this altered relation must free us from some of the conventional usages of medical society, and, at the same time, imposes on us extra obligations, and places us in positions of peculiar difficulty. In discussing also legal recognition by our respective Legislatures, we should regard the special characters of our colonial Governments, and, still more, the special exigencies of colonial life—not only in large centres, but in distant parts as well—that we may neither hamper a free profession nor a free people by a rigid and unsuitable law, nor tantalize a learned and certificated profession, and blind a public, which has often but little will and less material for discrimination, by an act which is practically lawless.

Look again at the isolated country practitioner, hundreds of miles from the capital, in his thinly-populated district. For months together he is entirely cut off from the society of his professional brethren, without a chance of interchange of ideas or the stimulus even of competition. Skilled assistance is unobtainable. He must do, with his own unaided hand, what is resolved by his own unsupported judgment. Such a state of things is almost unknown in the old country. The remedies and appliances, too, at his command, are often of the simplest nature and most limited supply, and with these he must do his best, and improvise according to his need. Picture a medical man, on a newly-discovered goldfield, whither there have rushed, within the course of two or three weeks, thousands of men, living as they have never lived before, in flimsy calico tents; their work unusual, laborious, and exposed; their diet often insufficient, inferior, unvaried, and badly prepared; their drinking water brackish, and contaminated with decomposing organic matter; the very air polluted by unsavoury and insanitary surroundings. Picture the practitioner working according to the methods of a London hospital. No, he must grasp the situation and adapt himself to it; do what can be done with the means at his disposal, meagre though they be; and accommodate his treatment to the circumstances, however unfavourable and unusual.

In greater or less degree the same applies to us all, for instance the excessive heat of our summer, continued for many days together, not only relaxes the fibre of the healthy, but often kills outright the very young, the old, and the feeble. Have we not to tax our ingenuity and our resources to the utmost to obviate its fatal tendencies in the case of delicate infants and of those suffering from pyrexia, whose probabilities of life are reduced by the serious heat of the houses and the air? And so in many other particulars, our surroundings are unlike those of medical men in England, and, if we are wise, our manner and our methods will vary in an equal ratio. Just as the special characters of our colonial land business brought, as a wise and natural consequence, the Real Property Act, in place of the cumbrous methods of land transfer still in force in England, so should the exigencies of colonial life result in wise and simple adaptations in the domain of medicine; and whether it be the disposal of our sewage or the disposal of our dead—not to follow blindly the sentiments of the society or the example of others, but learn what had best be done by *us*, and do it—taking all the experience of others, but not failing to combine it with our own.

To resume then. There is reason why Australian professional men should meet in Congress—that they may make common property what facts peculiar to Australia have been observed in disease, what methods employed have proved most appropriate in their hands, what new remedies Nature has provided at our doors, what suggestions relating to medical ethics or legal status arise out of our colonial life, and that an opportunity may be afforded those far away to contribute their unique or exceptional experiences for the general interest, and to reap the pleasure and profit of that social and professional intercourse which is so rarely their's.

Now, almost the same facts which we have mentioned as arguments in favour of conference could be adduced with equal force in support of an intercolonial medical journal, in which our facts, theories, and proposals might all be made common property, be discussed in measured words, and be preserved for future reference. And, while we could not abandon our *Lancet* and *British Medical Journal* and other British weeklies, which are our post graduate educators, and keep us abreast of the times, we ought to have some organ of our own which has the confidence and support of all the colonies, and in which shall be perpetuated whatever is worthy in connection with Australian medicine. And might we not, as a Congress, discuss such an enterprise?

Now, I do not imagine that our Congress will accomplish during this week all I have indicated as lying within our province. Even the best of us require to be educated up to the possibilities, the best methods, of such gatherings. To know we have fairly and unitedly begun will be a satisfaction. Especially will this be the case if, as I hope, it shall be decided before we conclude our business to call the Congress together again, and to regard this gathering in Adelaide as its first session only. This will be for you to determine. One suggestion only I will make. If the decision be favourable, let the sessions be neither so frequent as to make them impracticable, nor so seldom as to lose their interest. Nor do I presume our arrangements will be found perfection. The Committee has laboured under the disadvantage of having to inaugurate, and has therefore been compelled to take to itself certain powers, because they could not be conferred. It has had to draw up a tentative programme, for the simple reason that it had no previous experience as a guide. This disadvantage will not be the lot of future executives, and must be our apology for any dislocation of appointments which may occur.

His Excellency has done us the honour to open our Congress, for which our heartiest thanks are justly due. We shall find abundant opportunity for honest work in the four sections which have been arranged. Let each one be devoted to it with a three-fold motive—the improvement of ourselves, the benefit of our fellows, and the advance of truth.

THE ADDRESS IN MEDICINE.

By John Williams, M.D. Univ. Edin. et Melb.

President of the Medical Society of Victoria. Physician to the Melbourne Hospital. Lecturer on Clinical Medicine and Examiner in Medicine at the University of Melbourne.

SOME CHARACTERISTICS OF MODERN MEDICINE.

Mr. President and Gentlemen,—

In taking the chair of the Medical Section, I have great pleasure in congratulating the profession in South Australia on the successful inauguration of this, the first Intercolonial Medical Congress of Australasia. South Australia may justly be proud that the vigorous enterprise and scientific spirit of her leading practitioners have brought together an assembly so honourably representing the brotherhood of medicine in these colonies. I tender my warmest thanks to the members of the Executive Committee for the distinction which they have conferred upon me, by the invitation to preside over this important section, and to deliver the address in medicine. At the same time, I must confess that the pleasure with which I was anticipating my visit to Adelaide, and the opportunity which it would afford of becoming personally acquainted with many distinguished physicians, hitherto known to me only by name, was largely alloyed by a sense of the responsibilities which I must assume in accepting this invitation. This feeling of responsibility was not decreased when I cast about in my mind for some subject, on which I might fittingly address you within the limited time at my disposal.

In view of the fact that this is the first Medical Congress held in our part of the world, it seemed to me that I might appropriately take for my subject a brief sketch of some of the *Characteristics of Modern Medicine,* glancing at its development in the past, and at a few of the circumstances which will determine its future progress. In so doing, I shall not be able to bring before you anything startlingly new, and I trust that the importance of the subject will atone for any weakness which may be found in my presentation of it.

If we ask, what is the chief feature of modern medical work, I think the answer may well be—the attempt to grasp the natural history of disease. By this I mean, not merely the establishment of the connection between certain clinical signs and symptoms noticed during life and certain morbid conditions found after death, but the endeavour to trace the whole history of disease in the living body; to learn its origin and its course; to know the laws which govern its progress; to distinguish processes which are compensatory and conservative from those which are harmful and destructive; to recognise the inter-dependence of the several organs in disease; to appreciate the value of the element of time in the development of morbid conditions, and in the determination of the symptoms which arise from them; to rightly estimate our power to arrest or mitigate or guide the progress of disease. Such a knowledge must be the only sound basis of a scientific system of therapeutics.

It will readily be conceded that the progress of scientific medicine has been largely dependent upon the growth of our knowledge of physiology and of exact pathology. It is startling to compare the physiology of to-day, as represented by such works as those of Foster and Landois, and by the practical manuals of the various physiological laboratories, with the barrenness of the physiological teaching which prevailed fifty years ago. So, also, the old speculative pathology gradually disappeared; enquirers soberly tried to place themselves face to face with facts; observations multiplied until Rokitansky's monumental work appeared—a storehouse of valuable reference, though the accurate descriptions of morbid appearances in which it abounds are encumbered by the intrusion of much vague speculation. Since his time, owing largely to the development of microscopical histology, the doctrines of inflammation and repair have been placed upon sound bases; the studies of tumours, of parasites, and of micro-organisms have given rise to distinct branches of medical science in onkology, helminthology and bacteriology; and the immense strides which pathology has taken may be easily gauged by comparing the works of Baillie, of Hope, and of Carswell, published about the commencement of the Victorian era, with those of Ziegler, and Wilks and Moxon, and with the splendid pathological atlas of the New Sydenham Society, whose only fault is the slowness of its serial appearance.

With this advance on the pathological side, there has been a corresponding development of clinical medicine; gradually, by the labours of an army of workers, the recognition of disease in the living body has become possible, with an accuracy formerly undreamt of. Affections once confounded together have been clearly distinguished, the various types and stages of complaints have been defined, and the existence of many diseases previously unknown has been thoroughly demonstrated. To the progress of clinical medicine much help has been afforded by instruments of precision; the mere enumeration of the stethoscope, the sphygmograph, the laryngoscope, the clinical thermometer, the ophthalmoscope, and of electricity as applied for purposes of diagnosis, will suffice to indicate how great is the service thus rendered to the clinical investigator.

Thus, step by step, a fuller knowledge has been obtained of the history of disease in the living body, of its origin and course, and of the laws which govern its progress. The gradual character of the advance is strikingly illustrated in the case of enteric fever. At the outset of the present century Broussais recognised the inflammation and ulceration of the intestine; in the third decade Bretonneau localised the lesions in the solitary and agminated glands; yet, for nearly twenty years onwards, Cullen's confused classification of continued fevers into synocha, synochus and typhus still held sway in Great Britain; and, spite of the protests of occasional observers, typhus and typhoid were still confounded together, the bowel lesions being generally considered as mere complications or occasional accompaniments of the disease. At the middle of the century, however, Jenner, in his masterly papers, definitely mapped out for all time the essential symptoms and morbid appearances in typhus and in enteric fever. In 1857, William Budd, in a paper published in the *Lancet*, enunciated the well-known views concerning the spread of enteric fever, to which he had first been directed by the North Tawton outbreak in 1839. Then followed the laborious researches of Murchison and Liebermeister, also too familiar to need recapitulation. Before 1870, Buchanan, Seaton and Thorne had clearly demonstrated the spread of the disease by contaminated drinking-water; and in that year Ballard's report on the Islington outbreak proved that milk might be an effective carrier of the virus. Radcliffe and Power and others continued the enquiry, and Cayley's Croonian lectures, in 1880, formed a terminal epoch in its history. Not that the end has been nearly reached; for on many points connected with the causation of enteric fever, our knowledge is still far from precise. Perhaps that the researches of Gaffky and others will lead to the complete identification of the microbe of the disease, in which case the conditions which govern the multiplication of the organism outside of the human body, and which determine its virulence, might be studied with facility, and information of the highest sanitary importance might be obtained. Other examples suggest themselves, showing how gradual has been the growth of an accurate knowledge of disease. But, as time presses, I pass on to indicate briefly how this clearer knowledge enables us to distinguish morbid processes whose natural tendency is towards recovery, and which need only the gentle guidance of the physician, from those which endanger life or which pass inevitably to a fatal termination. The fact that many diseases run a definite course, generally ending in spontaneous resolution, while imperfectly appreciated, encouraged the growth of various irregular schools of medicine, which boastfully claimed for their inert or useless remedies, the restorative power which belongs to kindly nature. But our fuller knowledge of the history of disease is fast striking at the roots of these fungous excrescences of medical science, and at the same time is teaching us to abstain from unnecessary interference with the natural tendency to recovery.

One great outcome of recent research has been the wider recognition of the principle of compensation in disease. Some examples of its action have long been well known, such as the increased growth of one kidney when the other atrophies; the enlargement of one lung when the other is disabled; the hypertrophy of the muscular wall of the bladder in cases of stricture of the urethra. But the full application of this principle to cardiac disease is one of the triumphs of modern pathology. When I was a student, I was taught to regard hypertrophy of the heart as a thing to be dreaded and to be treated vigorously, whilst dilatation was scarcely mentioned, and only as a matter of subordinate importance. We now know that the intensity of the symptoms and the danger to life in valvular disease are proportionate to the degree in which dilatation predominates over hypertrophy. It may be stated absolutely that hypertrophy arises in every case from the effort of the heart to overcome some increased resistance to its effective action, that it never passes beyond the point of compensation, and that, therefore, it is essentially a conservative process. Cases of chronic valvular disease thus resolve themselves roughly into those with perfect and those with imperfect compensatory hypertrophy.

The varying expressions and degrees of compensation, which follow the several lesions of the different valves, furnish one of the most interesting studies in practical medicine. We learn, in the first place, the marked difference between the phenomena of obstructive and of regurgitant disease, the slow progress and the tendency to compensation seen in the former, the more rapid development and difficulty in compensation which characterise most cases of the latter. The diversity in history, symptoms and tendency between cases of aortic obstruction and aortic regurgitation is generally understood; but I question if most practitioners appreciate the vast distinction in the same respects between cases of pure mitral regurgitation, which, by the way, are not of frequent occurrence, and cases of simple mitral obstruction, which are relatively common. In mitral obstruction, the hypertrophy of the left auricle, which varies so greatly in degree, is almost purely conservative, and, if sufficient, may establish fairly complete accommodation. In regurgitation, the hypertrophy of the left ventricle is also conservative, yet it tends not only to improve the systemic circulation, but also to increase the reflux into the auricle, and thus add to the backward pressure on the lungs. Even in this case, however, safety lies in the abundance of hypertrophy, danger in the predominance of dilatation. Much remains to be learnt in connection with these problems. We do not know with certainty the mode in which hypertrophy is produced; we still attribute it vaguely to a general law that increased work brings increased growth. We are ignorant of the means by which nature secures increased growth of the wall of the left ventricle alone, notwithstanding that the blood-supply and a large proportion of the muscular fibres of the ventricles are common to both sides of the heart. Herein there is room for valuable work by enquirers in the domains both of normal and morbid anatomy.

After speaking thus about the main features of heart disease in regard to compensation, I may also remark that when compensation fails, when dilatation is progressing, when symptoms of heart failure are prominent, some of the phenomena, which seem at first sight evidences of danger only, are really, at least for a time, conservative in their nature. Dropsy, for example, is well known to be an expression of the failure of the heart's driving power, and of the defective *vis a tergo* in the venous capillaries. Yet this effusion of serum into the lymph spaces of the connective tissue may lessen the heart's work by diminishing the volume of circulating blood, thus relieving the distension of the right cavities of the heart, and it may perhaps produce more remote benefit by causing a concentration of the blood itself. Whether this is the true explanation or not, I have often noticed an amelioration of the symptoms referable to the heart, concurrent with the development of anasarca. The beneficial results of spontaneous hæmorrhage and diarrhœa during the later stages of heart disease may be quoted to the same effect.

It is by taking such comprehensive views that we are able to render effective aid by therapeutic measures, without unduly checking those spontaneous processes which are in themselves salutary. From similar considerations, viewed in a wider sense, we are able to understand the confidence formerly reposed in blood-letting in cases of acute inflammation attended with engorgement of the right heart—a confidence which, of late years, has been abandoned in far too absolute a measure. We may also learn to recognise that it is not inconsistent to combine the administration of stimulants with the abstraction of blood—the brandy bottle waiting on the lancet.

Closely allied to the subject last considered is the interdependence of the various organs in disease. Some prominent instances of this principle are universally recognised, as for example, the relation of the skin to the kidneys in respect of the regulation of the amount of water in the body. Every one is familiar with the improvement which follows the use of diuretics in hyperæmic affections of the skin, a practice which illustrates in striking manner the value of physiological rest in the treatment of disease. Another example of a different kind may be found in the history of the development of the lungs and the liver. In fœtal life, when the lungs are inactive, the liver is of great size compared with the weight of the body, being charged with the entire duty of excreting the superfluous carbon from the blood. After birth, with the development of respiration, this function of the liver recedes into a less important position; yet whenever the action of the lungs is impeded for any length of time, an increase in the size of the liver may be expected. Another illustration may be taken from physiology, in the history of the formation of urea; the first steps in the destructive metamorphosis of albuminoid substances within the body are very obscure and doubtless take place in all parts of the system; yet the liver has apparently some pronounced share in the earlier stages of this metabolism; for in acute atrophy of the liver, as we all know, the urea disappears partly or entirely from the urine, being replaced by the less oxidised products, leucin and tyrosin. In all cases of chronic atrophy of the liver, there is a tendency to compensatory enlargement of the kidneys; and in jaundice, when the elements of bile are accumulating in the blood, the kidneys to the utmost of their power will assume the excretory functions of the liver.

The best example, however, of the interdependence of organs in disease is undoubtedly furnished by the history of cases of atrophic interstitial nephritis—the red granular contracting kidney. Here there are primarily three elements, varying in their respective values—the thickening of the coats of the renal arterioles, the atrophy of the urinary tubules, and the growth of fibro-cellular, or densely fibrous tissue, between the tubes. Two results should follow—obstruction to the local circulation through the kidneys, and diminished functional activity of these organs. To a certain extent these consequences do occur, but then ensue the remarkable phenomena, with which we are now so familiar. The imperfectly depurated blood stimulates the small arteries to contract, so that a new resistance is introduced between the left ventricle and the capillaries; continued irritation of the coats of the arterioles causes additional obstruction, either as Johnson says, by inducing hypertrophy of their muscular coat, or according to Gull and Sutton, by irritative changes, ending in arterio-capillary fibrosis. The left ventricle has, from an early stage, sympathised with these changes. In response to the increased resistance it contracts more forcibly, and continued forcible contraction leads to hypertrophy. Thus blood tension rises, so that, notwithstanding the obstructive changes in the kidneys, urine is excreted in large quantity, though of low specific gravity. In this manner, by the inter-action of the kidneys, the small arteries and the left ventricle, a remarkable compensation is attained, a condition in which the patient is not aware of any illness, nay rather, in which he feels his bodily and mental powers in fullest vigor, and perhaps executes the most notable parts of his life-work. Yet the recognition of the patient's condition is not difficult, if attention be once drawn to him by some intercurrent illness. The abundant urine of low specific gravity, the hypertrophied heart, the tense slowly recoiling pulse, conjoined with the relatively weak capillary circulation, are sufficiently suggestive.

The high blood tension brings with it the dangers attendant on overstrain of the vessels—atheroma, aneurism, hæmorrhage, apoplexy; all incidental inflammations or injuries will tend to disturb the compensation which has been attained, and will themselves, in nearly all cases, be seriously modified in their course. At a later stage, the whole aspect of the case changes. The over-worked heart, having increased to sixteen, or twenty, or even twenty-five ounces in weight, begins to fail, perhaps through primary degeneration of its fibres, perhaps through atheroma of the coronary arteries and defective nutrition consequent thereon. Notwithstanding that the peripheral resistance afforded by the contracted thickened arterioles still continues, the failure of the heart is evidenced by the falling blood tension. The strain is removed from the vessels, and the risks of aneurism and apoplexy are over; but an ominous and progressive fall in the quantity of urine excreted heralds the new danger of defective nitrogenous elimination, and the establishment of that ill-understood condition, too well-known by all of us in practice under the name of uræmia.

I have traced the history of these conditions, with which you are all familiar, at what may appear to be unnecessary length, in order by it to lay stress on the important part which the physician should play in directing the life of a patient in whom such complicated processes of organic failure and compensation are at work. In the more advanced stages of such conditions, the patient's attention may be drawn rather to his digestive organs, or to his respiratory apparatus, than to the true source of his trouble. In the early stages he will probably be little conscious of any abnormal condition. Suspicion of the real mischief would be entertained only by the watchful family medical attendant; and herein is an example of the great importance of this office, and of the folly of those patients, unfortunately too numerous, who think that in the multitude of counsellors there is wisdom, and who wander from one practitioner to another, seeking help and finding none. There is herein also a warning to the physician not to be satisfied with a scrutiny of the prominent symptoms on account of which patients present themselves, but to deal with the constitution of each patient as a whole; and, whenever any ailment presents unusual features or unexpected difficulties, to be on the watch for those constitutional conditions whose existence may be hidden by such compensatory changes as those which I have attempted to describe.

The importance of the element of time in the natural history of disease has already attracted our attention indirectly, in connection with processes of compensation and adjustment. Simple and familiar instances will suffice to demonstrate its intimate relations, not merely to the course of pathological processes, but to diagnosis and treatment. Thus, a small aneurism of the aorta, growing rapidly, often produces far more severe symptoms than those manifested when a huge sac has slowly displaced and distorted the surrounding structures. The intensity of the early symptoms indicates the essential lines of treatment; acute aneurism generally occurs in robust persons with high blood tension—persons impatient of restraint, who, if left to themselves, would speedily sacrifice their last small chance of recovery. Absolute rest and decided reduction of blood tension, by leeching, or preferably by venesection, constitute the only scientific treatment; whereas, with a large slowly-formed aneurism, while rest is necessary, such abrupt lowering of the patient's strength would be distinctly injurious. Similarly, some hydatids gradually attain a considerable size while their hosts are unaware of their presence; others, more rapid in their progress, attract attention by their pressure effects when comparatively small. Insidious growth to a large size probably involves the presence of a densely fibroid adventitia, and thus gives warning that collapse after tapping will be difficult, and that special attention must be paid to drainage. On the other hand, especially in pulmonary cysts, rapid growth brings with it the danger of spontaneous rupture, but promises speedy collapse and cure after paracentesis.

One great source of error, both in prognosis and in treatment, springing from want of due appreciation of this element of time, lies in the vagueness of the term "chronic," as applied to disease. Thus it may imply prolonged duration, or absence of marked fever, or freedom from so-called "acute" symptoms. The current use of the phrase "chronic phthisis" will illustrate my meaning, for under this denomination are placed morbid processes of widely different character, so that the term "chronic" not unfrequently masks a steady and not slow progression to a fatal issue.

The diversity of the processes of "back-working" in cases of mitral obstruction and regurgitation furnishes one of the best examples of the influence of the element of time over the history of disease. In mitral obstruction, the primary lesion is almost always gradual in development; opportunity is provided for decided hypertrophy of the left auricle; the slowly augmenting tension in the vessels of the lungs leads to dilatation of the capillaries, overgrowth of the interlobular connective tissue, copious deposit of pigment, and all the phenomena of brown induration. The embarrassment of the pulmonary circulation is so insidious in its progress, that the right ventricle has abundant time in which to hypertrophy. Such hypertrophy is clearly conservative, as it prevents for a long time any serious interference with the systemic venous currents; but it brings new evil by aggravating the tension in the pulmonary vessels, adding to the distressing sense of fulness in the chest, and increasing the tendency to hæmorrhage. When the ventricle dilates, and the tricuspid valve begins to leak, the lessened strain in the capillaries of the lungs is often welcomed by the patient as a relief; yet this temporary ease is but the precursor of systemic venous engorgement. The slowness of the failure of the right heart permits the typical development of the tough, dark nutmeg liver, a development which may attain such a degree as to determine the occurrence of ascites, while anasarca is still inconsiderable. On the other hand, in most cases of mitral regurgitation, the rapidity with which "back-working" is established induces œdema of the lungs rather than brown induration, and dilatation of the right ventricle rather than hypertrophy, while the relatively early incompetence of the tricuspid valve soon brings into prominence the phenomena of general venous engorgement.

To rightly estimate our power to arrest or mitigate or guide the progress of disease. This is the consummate flower of medical science. Exact diagnosis and prognosis have their own especial values, even apart from all question of treatment; but it is by the power to arrest disease, to prolong life, to relieve suffering, that the medical profession must justify its existence. Various are the agents which we must employ for these ends, various our real knowledge of the agents which we use. No small part of our treatment is still empiric, based only on experience of results; yet year by year the science of rational therapeutics is growing wider and more precise; the chemist, the physiologist, the pathologist and the physician now join hand in hand; and, far off, we look forward to the time when the mass of undigested facts and details, which now embarrass us, shall have passed through the crucible of the minds of other generations, and shall be cast in perfect mould, embodying in the just proportion of its different parts that natural history of disease of which I have feebly tried to speak.

Briefly then, let me, before ending my remarks, indicate some of the means whereby we may favour the progress of medical science and of the healing art. In the first place, it is absolutely necessary that the physician and the pathologist should work together; otherwise the observations of both are imperfect and of comparatively little value. Now and then a man like Bright, abounding in energy, becomes eminent in both these spheres, and leaves an imperishable name for his services to medicine. But, as a rule, the tendance of the living and the examination of the dead must be entrusted to different officers. Collation of their respective records is good, but it is not the best. There is needed a thorough sympathy, an active co-operation in inquiry between physician and pathologist, which shall lead each to assist, to verify, to correct the work of the other. I fear that such union is far from common, and I therefore urge this consideration upon the notice of the officers of our metropolitan hospitals, and the teachers of our medical schools, who almost alone have the opportunity to co-operate in such manner.

But, though the large hospital is the natural home of medical inquiry, it has its own inherent defects, in that hospital practice deals with a patient only during some very limited portion of his career. The causes of disease, the influence of family tendency and of personal surroundings, the connected history of patients from birth to death, the questions of idiosyncrasy in treatment, all these form the domain of inquiry for the private practitioner. In these matters, too, the country physician has many advantages over his confrères in the larger cities and towns; he has more accurate and continuous knowledge of his patients, he deals with questions in simpler form, and hence his observations should be most valuable. Without doubt, the present isolated professional life of the bulk of country practitioners involves a grievous waste of useful knowledge, which should be conserved for the general good. The remedy would seem to be the adoption of the system of collective investigation. At the Copenhagen Congress in 1886, Sir William Gull explained the work which was being done by the Collective Investigation Committee of the British Medical Association. Fifty sub-committees had already been formed in the United Kingdom, including a thousand members. At the close of his eloquent address, it was resolved to form an International Committee for the Collective Investigation of Disease. The various countries of Europe, with North and South America, are represented on that Committee. Might not one result of this Congress well be the formation of an Australasian Branch of that Committee, so as to give purpose and method to the observations of the general body of our practitioners?

Lastly, in addition to co-operation between the workers in the vast fields of research afforded by our hospitals, and to some method of collating the experience of physicians in all parts of the Colonies, I would in a few words refer to the necessity for special enquirers. The life of Duchenne aptly illustrates my meaning. Early acquiring a taste for electro-therapeutics, and finding no scope for his enquiries at Boulogne, he proceeded to Paris in 1842, and there set himself to the study of the nervous and muscular mechanism in health and disease. He accepted no official appointment, but wandered through the various hospitals, eagerly investigating all cases that bore upon his studies, following them up from hospital to hospital and to their private retreats, and thus at last left behind him that series of discoveries which is a treasured heirloom to succeeding generations.

Is not the time coming, in the history of these Colonies, when special research shall be—not the characteristic of a few workers widely scattered from one another—but a spirit moving everywhere, impelling the best minds to bend themselves with all their energies to add something tried and sure to the sum of human knowledge? Thus may we aid in realising the words of Graves, true to some extent even in his day, more true now, but pregnant with hopeful prophecy for the future:—"The reason of man is "now more fully employed than at any former period; a vast store "of mental power, a vast mass of mind is everywhere at work; "what formerly was vainly attempted by the labours of a few, is "now easily accomplished by the exertions of the many. The "empire of reason, extending from the old to the new world, from "Europe to our Antipodes, has encircled the earth: the sun never "sets upon her dominions, individuals must rest, but the collective "intelligence of the species never rests; at the moment one nation, "wearied by the toils of day, welcomes the shades of night, and "lies down to seek repose, another arises to hail the light of "morning, and refreshed speeds the noble work of science."

ADDRESS IN SURGERY.

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THE PROGRESS OF SURGERY.

Mr. President and Gentlemen,—

When I became aware that the Committee of this Intercolonial Medical Congress had paid me the honour of electing me to preside over the Surgical Section, I felt very sensible of the distinction accorded to me, and the more so, as I could not but realise how abundant, in South Australia itself, is the choice in scientific surgeons, who not only possess high professional qualifications, but have made themselves personally distinguished in their art. I assure you, without affectation, that I accepted the honòur, so generously tendered, with some diffidence and self-distrust. For I bore in mind that, in opening this Section, I should necessarily have to review the surgical history of the last half-century, and that such a labour would demand a more intimate familiarity with the progress of the times, than is possible to one engaged in the daily labour of professional duties. The pleasure of taking part in this important gathering, however, overcame my self-distrust, and I felt sure, moreover, that you would further extend your kindness, by permitting me to deal with the subject in my own way.

Let me first offer my felicitations upon the completion of the first half-century of the history of this colony, a half-century, as we all remember, coincident with the reign of Her Most Gracious Majesty the Queen. It is also just fifty years since a memorable meeting was held in Exeter Hall, London, to found that wonderful organisation, The British Medical Association, whose growth and influence have reached a degree without parallel and without precedent, and with which much of the recent progress of surgery has been identified.

If we consider what have been the most important events which have marked the progress of surgery, the first will be found in the discovery long ago by Ambroise Paré of the use of the ligature, without which even the coarsest operations were impossible. This discovery led up, in more recent days, to the practice of torsion, and to the employment of catgut and tendon ligatures, which have rightly, to a very large extent, replaced the hempen thread. The next discovery of prime importance belongs to our own era, and was given to the world by members of the English speaking race. Need I say that I allude to the invention of anæsthesia by nitrous oxide, ether and chloroform, through which Horace Wells, Morton and James Simpson made practicable a host of operations which formerly could not be attempted. This discovery, coupled with other advances, has completely revolutionised the entire *pratique* of surgery. Some of us can well remember the operating theatre of old, ensanguined like a slaughter yard, the air rent with the shrieks of the unhappy victims quivering under the knife of the operator, whose one object was, of necessity, to hurry over his work, too often sacrificing safety to celerity.

When the Queen began her reign, Abernethy, quaint, cross, sometimes rude, but always large of heart and clear of head, had just gone to his rest; the coarse but eloquent Dupuytren had been laid in Père-la-Chaise, and in his place, at the Academy, stood the philosophic Brescher, while at the Hotel Dieu he had been followed by the dexterous Roux. Velpeau had gone to La Charité; Delpech lay slain by an assassin's weapon; Lisfranc was at La Pitié; the kindly Broyer was busy with his delicate manipulations; and Civiale was initiating lithotrity. In Germany, Dieffenbach was explaining tenotomy, and splitting stammering tongues; Langenbeck was experimenting in irrigation; and Graefe's greatness was just dawning in Berlin. In London, the courtly Astley Cooper had but recently retired from the then most lucrative practice ever reached in the world, to publish the last of his immortal quartos, namely, his treatise on the mammary gland. Over him, too, the grave was soon to close, and so also was it over his friend, Charles Bell. Lawrence and Skey were the bright lights at St. Bartholomew's; Hawkins and Brodie held high places at St. George's; Guthrie was chief at Westminster; Fergusson had, indeed, migrated to the great Metropolis of the world, but had not yet his home at King's; and Paget was but a beginner. In Dublin, Cusack, Crampton, Collis, Bellingham and Carmichael were in the plenitude of their well-earned fame; while in Scotland, Syme had not yet dreamed of that journey to the South which proved to him so full of profitless vexation.

Prior to the days of anæsthetics, the periodical literature of surgery represented energy rather than research. Conservative surgery was not greatly in favour, and brilliancy was the chief object aimed at. The records of hospital practice were rather boastful than instructive. The difficulty of an operation, rather than the benefit to accrue from it, was most in men's minds, and unquestionably, on the score of boldness, there was nothing lacking. The deligation of large arterial trunks was common. Lizars and others had tied the innominata for sub-clavian aneurism; and Wickham had tied both the carotid and subclavian for innominate aneurism. Plastic operations, especially the Tagliacotian, were not infrequent, and we can readily imagine what agony the patients must have suffered in skin transplantations when there was no chloroform. Lithotrity was growing into favour, although the recognition of its value was slow. Amussat had successfully cut into the colon, and he seems to have been the first to incise the trachea for the extraction of a foreign body. Mayo had only recently electrified all surgical London by, after ligaturing the femoral artery, amputating at the hip joint in less than thirty seconds. Syme had performed and described his now well-known urethral section. Excision of the elbow-joint had been done on a few occasions, but none of the other large articulations, save the shoulder-joint, had up to this time been saved from the amputating knife. Frequently in amputations, the flaps were not at once sewn together, but were left exposed until "glazing" took place, sometimes even for two or three days.

With regard to abdominal surgery, we read of successful cases of ovariotomy, by Jeafferson, King, Lizars, Smith and others. The bulk of the operators, however, then and for some time after, predicted nothing but evil from such rash ventures. In this branch of surgery King, of Saxmundham, surpassed all his contemporaries, for, anticipating Tait, he fearlessly explored the abdomen for diagnostic purposes.

All this appears to represent the extent to which practical surgery had reached up to 1846. Meanwhile, however, it is certain that in medical education a notable improvement was taking place, and that both the process of teaching and the methods of examination showed a great advance upon what had hitherto been the rule. The London University had herein communicated an impetus which was both felt and acknowledged by all the other licensing bodies; and although the examination questions, as now read, appear exceedingly elementary, they were probably at that date regarded as severe. No doubt, during the early forties, the standard of medical education was low in the extreme. For the diplomas, no arts test was demanded, and the standard for the highest qualifications then obtainable was considerably lower than that for the meanest qualification of to-day.

The social gulf that lay between the consulting physician or the operating surgeon and the general body of the profession was very pronounced, and created an amount of jealousy that we, living in 1887, can hardly conceive.

To be at all successful as an operator then, certain qualifications were imperatively called for, which are not quite so absolutely necessary now. Firstly, the surgeon had to be a man insensible to the infliction of pain, little sympathetic in his nature, and indifferent if not dead to the sufferings of others. Nextly, manual dexterity, though always a surgical requirement, was of much greater importance than it is at present. A deliberate careful operator, such as Lister, would never have been a success, for operations had to be carried out as rapidly as possible from start to finish, at full gallop, and of course the performance was greatly impeded by the movements of the patient and the contractions and spasms of the muscles. Still it held good then as now, that no man, however skilful he might be, however learned or educated, could expect to command success, unless chance, birth, or position had fortunately enabled him to secure a hospital appointment in early life. Yet a surgeon is born, not made, and there are men who could not become operators, notwithstanding the possession of all these advantages. To my mind the old adage is true, that a surgeon should possess in addition to a thorough theoretical and practical knowledge of his profession, "the eye of a hawk, the heart of a lion, and the hand of a lady." In the main, the surgery of the day was almost exclusively in the hands of the metropolitan teachers, much more so than it is at present. There were however in the provinces some really great surgeons, and the names of James, De la Garde, Whipple, Clement, Wickham, Jeafferson, King and Hey will always be remembered as those of men possessing the highest surgical skill, quite equal, if not superior to their contemporaries in London, Edinburgh, and Dublin.

If the surgery was in the hands of a few, the surgical procedures permissible, as compared with those to-day, were also extremely limited. In fact, operations were in reality almost wholly confined to those which had to be performed either to relieve agony, or to prevent a painful death. In children, whose feelings were matters not to be consulted, some little latitude was allowed, and in this way tenotomy crept into practice. If during this period any improvement or advance took place, it was very infinitesimal. Practical surgery, except in some special departments, such as ophthalmology, had virtually come to a standstill, and that, in spite of the undoubted genius of its votaries. Operations could be devised, but they could not be carried out. Several of the major procedures, now of daily occurrence, were schemed by the old anatomists, such as Haller; and, in the early part of this century, John Bell designed ovariotomy, for his pupil McDowell to perform in Kentucky. Few patients, however, could be found with fortitude sufficient to encounter the surgeon's knife, and thus death was allowed to be the only termination to many diseases now recognised as curable. With respect to the epoch of anæsthesia by ether in 1846, it is not for me to detail its history. It is familiar to everyone. You all know how Wells first used Sir Humphrey Davy's nitrous oxide; how Morton and Jackson plotted to patent the use of ether, and how the one betrayed the other; how Simpson, acting on the advice of his acquaintance Waldie, first boldly and successfully gave chloroform; how Liston, full of exultation at the discovery, wrote of its marvellous powers, and how Malgaigne jealously advised caution, and tried, but unsuccessfully, to damn it with faint praise. The story of anæsthetics is extant, and is written in all languages. So, too, is the story of the sudden development of operative surgery, which followed immediately. Both operations and operators multiplied with marvellous rapidity.

To pass to one other advance, allusion to which after the mention of chloroform will not be an anti-climax, I refer to the sudden improvement which took place in what may be designated "The Hygiene of Surgery." Extraordinary as it may seem, it is, nevertheless, a fact that, until the conclusion of the Crimean war, no attention seems ever to have been paid to the lodgment of the sick or to the construction of hospitals. So completely had this subject been neglected, that I believe Sir George Ballingall, in his lectures on Military Surgery, was the only authority who, up to the close of 1857, ever considered it in public. Pamphlets, I admit, had appeared occasionally, but with reference only to the plan on which some particular infirmary should be erected, so as to utilise available land to the fullest extent. But the general hygiene of hospitals—light, ventilation, cubic space, &c., were, up to the end of the Crimean war, practically untouched subjects. The horrors of this campaign, the terrible sufferings of our magnificent army, and the courage with which the men bore their troubles, focussed the public attention in a manner that two cholera epidemics had failed to do. The result was Netley, with its school of hygiene. Still, as the fervour cooled, the subject would probably have been allowed to drop, but fortunately at this juncture the late Prince Consort came with his great personal influence to its assistance. Hygiene, especially military hygiene, had for His Royal Highness a singular attraction. He closely watched the institution as it rose on the banks of the Southampton water, inspecting and advising in a manner that astonished the engineers. This hospital was the first, I believe, ever built on the pavilion plan; the first ever constructed with regard to sanitary principles. When it was finished, a school of hygiene was founded, and an education in the subject became a permanent feature in the training of medical men for the public service. In this way, hospital construction, and skilled nursing came to receive proper recognition. To my mind, this is one of the most extraordinary circumstances in the history of surgery, that intelligent and duly trained men, daily surrounded with surgical infective fevers, should so long have failed to perceive their connection with defective sanitary arrangements. In the medical literature of the time we often read of purulent absorption, as it was then called, of pyæmia and so forth, but our immediate fathers had no idea of their relationship with bad drainage and overcrowding. And this is the more strange, for old military surgeons, such as Pringle and Jackson, had repeatedly, and in decidedly forcible language, asserted the superior healthfulness of tents and bamboo huts over roofed walls and scrubbed floors. The long peace had numbed the sensibility of the nation, for not the slightest notice was taken of the teachings of these observers, and the experience of the Peninsular war was thrown away. Disastrous as it was in many respects, the Crimean campaign taught the lesson that surgical fevers were more fatal than typhus, and quite as infectious.

We who know more, may wonder at the slowness of our predecessors to appreciate these facts; but it would really seem as if great public questions require for their proper recognition some grievous catastrophe, some sudden revolution, some denouement, to change the aspect from which, by long habit, they have invariably been seen. For some years preceding the Crimean war a gradual improvement had been taking place in the hygiene of the people. They were becoming more temperate, better clothed, and better fed; the worst forms of hospital fevers, the old gangrene and the sloughing phagedæna, with attendant nitric acid treatment, were becoming rarer, lingering about the Lock and Civil Infirmaries on the outskirts of the military stations; nevertheless, pyæmia and septicæmia in the later fifties and early sixties were regarded as inevitable concomitants of hospital life—matters of course for which Providence was mainly responsible. Students, fresh from the dead-house, passed into the wards, and, without hindrance or warning, attended obstetric cases. Surgeons, with hands uncleansed of the contamination of the dead body, cut into the living flesh, and wondered that the operation turned out ill. In short, surgical cleanliness was unknown. Gay, surgeon to the Royal Free Hospital in Gray's Inn Road, admitted, and in fact almost boasted, at an inquest, that he had frequently operated on a constantly used dissecting table; and, though this ostentatious brag was perhaps exaggerated in the telling, it may be taken as a not inexpressive sign of the times, that the admission did not evoke universal reprobation.

Spencer Wells, in his early practice of ovariotomy, paid, as we all know, minute attention to all the details of the process, these including a careful avoidance of everything likely to convey impurity. His success necessarily stimulated inquiry as to its explanation. Previously, Semmelweis, whom his inappreciative countrymen had hunted from city to town, had noticed the contagiousness of puerperal fever, and had pointed out how it was conveyed from one woman to another by septic obstetricians. Then Simpson wrote his memorable paper on "Hospitalism," to which Holmes replied with his able but not convincing rejoinder. The German bacteriologists furnished fresh information on the subject, and Lister followed with his world-renowned theory and system of aseptic treatment. Allowing for all the undoubted progress which Listerism has brought, it may yet be asked,—does its secret consist only in cleanliness and dependent openings; or have the gauze and the spray imparted some new power to surgery? I am indeed of two frames of mind. When I read of the triumphs of Tait and of the wound treatment of Gamgee, I am disposed to hold that the nail brush and the tubing are the real factors of success; but when old memories revive, and I recall the hectic with his flushed face, bed-eaten skin and pus-sweating ulcers, I feel that there is really something in the system, though not nearly so much as its enthusiasts believe.

Leaving hygiene, and coming more to modern surgery, and especially that part of it which appertains to our own land, we find that Australian surgery possesses two peculiar features:—firstly, the prevalence of hydatid disease; and secondly, the absence of rachitis.

The frequency of hydatid confuses and complicates the diagnosis of every tumour; every deep-seated pain may have reference to it; and in persons of suitable age, the cicatrix of an old hydatid not infrequently becomes the seat of carcinomatous growth. A man consults me with a swelling in the groin, apparently unmistakable psoas abscess, though the seat of the bone lesion is obscure; I incise it, and out flows hydatid fluid. Again, I am called to attend what seems a severe tibial ostitis; operation reveals a parasitic cyst. Once more, I tap a hydatid tumour in an adult of 50; a year passes, I am invited to visit him at his house, and a cursory inspection at once discloses disseminated carcinoma of the liver.

Another feature which strikes a surgeon in Australia is the almost total absence of deformities due to inheritance or vicious osseous nutrition. A student may go through the whole of his curriculum without witnessing a genuine case of rickets, the beaded ribs and bowed legs being almost unknown in our wards. MacEwen, in Glasgow, a town whose population is not greater than that of Victoria, records his thousandth operation for genu valgum. I venture to say that if the whole of our colony was searched not five cases suitable for operation would be found. Any observant person walking down one of our side streets, and subsequently through a by-lane in a European city, will at once notice the difference. In the latter he will encounter mis-shapen, distorted little wretches, with enlarged heads, depressed noses and curved backs, with bent limbs and legs all over the place. On the other hand, look at the Australian child, even emerging from the lowest den—he is straight-limbed and level-featured; a neglected club-foot may possibly be met with, and occasionally one runs against a "Boiteux" from chronic hip disease, but rachitis and bone distortions, arising from other causes than fracture, are almost unknown.

Although we rarely find occasion for osteotomy, the tendons, bones and joints furnish us with an abundant and most attractive field for practical work. The tenotome is an instrument for which I early conceived a great predilection. Its employment in subcutaneous surgery is so neat and clean, so destitute of danger, so manifold in its applications, that I marvel how little use is generally made of it. While the division of tendons is commonly performed to remedy chronic deformity of joints, it is too often neglected in oblique and complicated fractures, and many dislocations, which have not been reduced at the outset, are improperly regarded as incurable. In the Melbourne Hospital I have succeeded in reducing luxations of the hip, of six and seven months' standing, by simple manipulation, after freely dividing the capsule and the tendons of all contracted muscles. The tenotome should also play an important part in the treatment of joint mischief, whether acute or chronic. Thus in acute synovitis of the hip, with copious effusion, evil must result if the tension within the joint is not speedily relieved; the ligaments soon become softened and elongated, losing their elasticity, so that repair is difficult; and if, after long lapse of time, recovery does take place, too often the swollen tissues undergo contraction, and almost irremediable deformity remains. Such mischief may be prevented by freely dividing the capsule subcutaneously behind the trochanter, thus allowing the contents of the joint to diffuse into the connective tissues around, at once relieving the ligaments from tension and preventing re-accumulation of inflammatory products. The fine trocar so often recommended, certainly gives relief, but often of merely temporary character, as the little opening is apt to close at once, thus necessitating a repetition of the operation. In another class of cases, unfortunately too frequent, an acute or subacute synovitis of the knee joint is neglected; the fluid originally effused is slowly absorbed, but the articular and peri-articular tissues remain thickened, the joint is largely disabled, and accessions of pain and swelling occur after any exertion. Here again, the tenotome renders signal service. By freely dividing subcutaneously the fibrous structures around the joint, we permit fluid to diffuse from one layer into another, and thus facilitate absorption in a very marked manner. Everyone must be familiar with such cases, and must recognise how slow and imperfect is the process of repair under the usual course of treatment.

The rapid recovery after free use of the tenotome affords a most grateful contrast. Cases even more serious, such as those in which chronic synovitis is leading on to pulpy degeneration, are only one degree less amenable to similar treatment. Here the synovial membrane is becoming swollen, spongy and friable, rich in cells but poor in vessels, and tends to spread over and erode the cartilaginous surfaces. Absorption is is almost at a standstill; the tissues are sodden, inelastic, with little or no power of contraction or repair, but, on the other hand, with a decided tendency to break down or to become the seat of a local tubercular process. Under these circumstances, the tenotome should be used more freely, so as completely to divide the synovial membrane in various places, thus encouraging the swollen tissues to empty themselves of fluid, and allowing the lymphatics around the joint to contribute to the progress of absorption. Such measures will not infrequently give material aid in avoiding the necessity for excision.

If we turn for a moment to the treatment of ostitis, a subject so intimately connected with joint disease, the tenotome will still be found of service, but mainly as an adjuvant to subcutaneous drilling of the bone. In acute ostitis, apart from septic infection, two great dangers must be faced, those resulting from tension of inflammatory products pent up within the rigid tissues of the bone, and those arising from the tendency to implication of an adjacent joint. Both these risks may be largely removed by the free use of the drill; but I must remind you that the opening made by the drill should be strictly subcutaneous. Valvular passages to the bone must first be made with a tenotome, and then the drill may be employed to almost any extent without fear. Epiphysial cartilages should be avoided, although their perforation by a drill does not as a rule cause any mischief. Unless pus has already formed, the drill is infinitely superior to the trephine in the treatment of acute inflammation of bone.

In chronic ostitis, whether rarefying or plastic, the trephine should not be used. The affected part should be drilled in different directions, so as to permit escape of the inflammatory exudation from the bone, the lymphatics of the periosteum and of the tissues around then coming actively into play. The great trochanter and the inferior epiphysis of the femur, the peri-articular portions of the os innominatum, the upper end of the tibia, the os calcis, and other bones may be cited as parts whose inflammatory processes are more easily controlled by drilling than by any other surgical procedure. But the same method may be applied to the smaller bones, as of the carpus or tarsus. Here ostitis not infrequently commences in subacute fashion, in some one bone in particular; if it is neglected, the whole series of carpal or tarsal joints may be implicated; but such bones, when affected singly or in groups, may be drilled freely without fear, and with excellent results. Cartilages should not be perforated unless necessary, although such perforation, when effected by subcutaneous drilling, produces little or no harm.

It may be thought that these statements are rather bold; but, after constant trial of these methods during the last sixteen years, I can confidently recommend them as having, with me, been almost uniformly successful. Perhaps your patience will not be wearied if I quote, very shortly, a few cases illustrating the practice I have just described.

Mr. M. H., æt. 37, called on me on August 10, 1886. He had been under treatment for two years for inflammation of the knee joint, and explained that he was unable to bend the leg or make any use of it without severe pain. On examination I found great thickening all round the joint, the synovial membrane being much thickened and œdematous, the patella seeming to be embedded in inflammatory products and partially fixed. Deep pressure on either side of the knee-cap caused great pain, and the motions of the joint were extremely limited. Dr. Meyer administered chloroform, and I subcutaneously sliced the synovial membrane and the fibrous structures around it in several places, in fact, all over the joint. The limb was placed on a posterior splint, and slight extension applied. Small doses of grey powder were ordered twice daily, and as there was subsequent swelling of the joint, hot fomentations were applied. At the expiration of three weeks the splint was removed, and passive motion tried, with massage. The patient rapidly recovered, and has now complete use of the joint. In the Melbourne Hospital, I have successfully treated many cases of pulpy synovitis by similar methods.

Early in January, this year, Dr. Bird asked me to see a lady with him in consultation. Mrs. C., æt. 29, rather a delicate-looking woman, has had two children, youngest two years old. She stated that she suffered intensely from intermittent pain in the right hip, which was worse at night, or after any exertion.

She described it as a burning aching pain, and said that she got most relief by abducting the limb, and supporting the knee on a pillow. On examination, the great trochanter and neck of the right femur were found much enlarged and painful, especially on deep pressure. There was slight effusion in the joint, and the limb could not be brought straight without causing lordosis. She was of course very lame. All ordinary means were tried without avail, viz., leeching, iodide of potassium, sedative liniments, rest, &c. As she was getting worse, I decided to drill the trochanter, neck and head of the femur. Dr. Bird administered chloroform, and I put in six drills obliquely, making first an incision with a tenotome, and following it up with a long drill right into the cancellous structures of the bone, the operation being so conducted that no air could be possibly admitted. The case progressed so favourably that she was able to attend her sister's wedding three weeks after the operation, and she is now in perfect health, free from pain, and walks without the slightest limp.

I do not wish to be tedious, but allow me to mention one case more, illustrating the lasting effects of drilling in sub-acute ostitis. Some six years ago, Mr. N., an Inspector in one of the Banks, called on me and gave the following history:—For nearly a year he had suffered from intermittent pain in the right tibia, always more severe at night; in fact he was seldom or never free from pain, which, during the last four months, had greatly interfered with his rest. The periosteum had been freely divided by a surgeon, with temporary relief, but the old pains returned immediately on the wound healing. In my own room, and without chloroform, I subcutaneously drilled right through the tibia. He was away from the office for two days only, but suffered pain for some little time after the operation; this soon left him, and I saw Mr. N. the other day looking the picture of health, and he told me that he had not the slightest return of the old trouble.

I could relate several other instances of a similar nature where I have used the drill, but to do so would consume too much time. I am confident that experience will prove the great utility of this instrument.

Another subcutaneous procedure which I have practised for many years with success, not unvarying, but still constant enough to warrant my warmly recommending its adoption, is the wiring of the pillars of the inguinal canal, for the radical cure of hernia. At the end of 1883, I published in the *British Medical Journal* a description of this operation. I will not take up your time by entering upon its details again, but I see by the home journals that the operation has been frequently performed and favourably spoken of. I have never had an opportunity of examining, post-mortem, the pillars of a wired canal, but one of my colleagues in the Melbourne Hospital has just related to me the following case. Whilst I was travelling in Europe, a young man was admitted into one of my wards, with a scrotal swelling of some considerable size. The tumour as it had developed suddenly, apparently after a blow, seemed to be a simple hæmatocele and was diagnosed as such, but as I had operated on the man some three years previously, and as the patient insisted that his hernia had descended, it was determined, on consultation, to open the scrotum and explore its contents. It was found that the tumour consisted merely, as was suspected, of a clot; the bowel had never come down; the ring was firmly closed, the caging wires could easily be felt, and the cure had been absolutely complete.

I can assert, without any reservation, that this operation is quite free from danger; that it has been completely successful in my hands, and that it is tolerably easy to perform after a little practice.

There are other applications and methods of subcutaneous surgery on which I would like to dwell, but as I have some intention of bringing my views forward in a more extended form, and as the time during which I may engross your attention is rapidly drawing to a close, I will pass on to a short review of some of my recent experiences at the other side of the world.

During my stay in Europe, whither I recently went to re-visit the scenes of my younger days, it was my good fortune and great pleasure to meet many of those illustrious men who do honour to our common brotherhood, and whose names are held in respect throughout all the civilized world. Of their personal kindness to me I can never say too much; but the gratification this attention afforded me was the greater, from the knowledge that it was, in some degree, a recognition of the medical profession on this side of the globe. I was present, in 1884, at the Medical Congress in Copenhagen, as the representative of Victoria, and as I listened to the address of Sir James Paget, whose name at once recalls his splendid contributions to surgical science, I felt that it was indeed a good thing to belong to the great federation of medicine. Among the many interesting papers read, were two by Esmarch, whose name is now high on the roll of great surgeons. One was on permanent antiseptic dressings, and the other on rectectomy for carcinoma. Sayre in his rough and ready style applied his plaster jacket to a little patient in our presence. Bryant read notes on colotomy in rectal disease; but, in the animated discussion which followed, the representatives of the French School of Surgery spoke strongly against the operation, advocating rectectomy in preference, a view which was shared by most of the Germans and by many of our own countrymen. I may remark that I have on several occasions performed rectectomy with gratifying results, and that in my opinion colotomy should be restricted to very exceptional cases. One of the papers which chiefly attracted my attention was that by MacEwen on osteotomy; but, as already mentioned, little opportunity of practising the operation is given us in these Colonies.

At a later period, I witnessed some rather startling surgery in Russia. In company with Sir James Paget, I was taken by Dr. Rheier to the Military Hospital at St. Petersburg, where I saw seven cases of laryngectomy, each patient being fitted with an artificial larynx. I must confess that the tests in the direction of vocal utterance were not an absolute success. In fact, the results were in a measure grotesque. Possibly my non-acquaintance with the Russian language had something to do with the apparently absurd attempts at articulation, and, perhaps, what appeared to me only a squeak, was very good Russian. At any rate, there was a uniformity in the sounds; the patients all squeaked the same note, and it was by no means euphonious. Dr. Rheier exhibited, also, a number of children upon whom resection had been performed, variously in the hip, knee and elbow; and he explained that, although in some of the cases he had removed large portions of bone, he had not found that the growth of the limb was thereby checked. I could not, however, quite gather if, in these resections, he had touched the epiphysial cartilage, or had gone beyond it.

With reference to Continental surgery generally, I deliberately formed the proud conviction that the surgeons of the Old Country still decidedly hold their own. I had the pleasure of seeing Mr. Christopher Heath operate on a case of disease of the jaw, and was delighted with the brilliancy and precision of his work. Sir Henry Thompson's lithotrity cases, of which I witnessed a good many, interested me strongly. Nor shall I soon forget the excellent surgery exhibited by that distinguished veteran, Mr. Savory, who showed me many patients treated without the cumbrous precautions of Listerian asepticism, but with that perfection of cleanly surgery of which Mr. Savory is so able an exponent. I would be the last to deny to Professor Lister any of the credit so fully due to him for his admirable investigations, and for the impetus which he has given to the observance of scientific cleanliness in surgical practice. But I hold, with many others, that the secrets of antiseptic surgery have yet to be revealed, and that in the meantime too much is made of processes which are unnecessarily cumbrous.

In the course of a visit to Dublin, after an absence of twenty-seven years, I met again my old teacher, Butcher, to my mind the pride of the Irish school of modern surgery. I can never forget his brilliant lithotomies, knee-joint re-sections, and many other operations which have justly made his name famous. Mr. Butcher's now failing health prevents further active work; but the reputation of the Irish school still holds its own, as there are several eminent surgeons in Dublin who fully uphold the high position it has up to the present justly maintained.

Coming back to the home of my adoption, I am pleased to believe that here in Australasia we are not wanting in the pursuit of science. We have careful enquirers, and bold and skilful operators. It would be invidious for me to single out any names for special mention; but I must take this opportunity of congratulating my confrères of Adelaide on the scientific spirit which animates them, on the value of their published researches, and on the brilliancy of their practical surgery.

And now let me say how hopeful this Congress makes me of the future of our great brotherhood, and how confident I am in the belief that we shall be one united body all through this Southern commonwealth. Our labours may be divided, but our common work all tends to unity. So that, whether we be physicians or surgeons or sub-divisional specialists, we have all one common end in view—the lessening of human suffering, and the consequent promotion of the happiness of our fellow-creatures.

As a precaution against the introduction of small-pox, it has been decided to detain for observation, at the Quarantine Station, all vessels coming from Port Darwin, as well as Intercolonial steamers, in which Chinese passengers have been transhipped.

British Medical Association.

VICTORIAN BRANCH.

Ordinary Monthly Meeting.

Wednesday, 27th July, 1887.

(Hall of the Royal Society, 8 p.m.)

Dr. Simmons in the chair.

There was a fair attendance of members.

The minutes of the previous meeting were read and confirmed.

Dr. Joske, M.B. Ch.B. Melb., of the Alfred Hospital, and Dr. James Anderson, L.R.C.S. L.R.C.P. Ed., of Footscray, were declared elected members of the Branch.

It was decided to hold the Annual Meeting on the last Wednesday of January, in each year.

Dr. Rowan then read a paper "On a Case of Vesical Calculus."

Dr. Hooper considered that the case was one of unusual difficulty, and taught a lesson in pluck and energy.

Dr. Neild thought the case must be a unique one. The wonder was, how it had been undetected and tolerated so long. He remembered twelve cases in lunatics without any symptoms, but none to compare with the present.

After some further remarks, Dr. Rowan replied and exhibited the specimen, and a photograph. The stone weighed 10 ounces.

Dr. Springthorpe then read a paper on "Phthisis in a Professional Diver."

Dr. Henry opened a discussion upon "the desirability of affording certain hospital facilities to outside practitioners." It would be a good thing for those medical men who were not connected with hospitals, to have the opportunity of seeing important operations and interesting cases under the care of those who were so connected. He was aware such could attend as a privilege, but he would desire not to feel an intruder. Invitations might be issued by post to such as wished to attend. He believed that Dr. Llewellin was ready to co-operate. The benefits of such a custom would be all round, and some such opportunities the outside profession had a right to expect.

Dr. Neild remarked, that twenty years ago, the same want had been felt, and was met by the kindness of Dr. Thomas in arranging with the newspapers to notify important operations, so that such medical men as wished could attend. The practice continued some three or four years, but ceased with his death.

Dr. **Rowan** said, that speaking for himself, he had no objection to doing what he could in the direction desired. It would require certain precautions, however, and would be impossible in certain cases.

Dr. **Kenny** thought that every facility was already afforded, days and hours of operation were fixed at all hospitals. One difficulty, however, was that the students might be prevented from taking advantage of their legitimate opportunities of seeing and hearing.

After some further discussion, it was decided to leave the matter to the Council.

Exhibits.

Dr. **Rowan** exhibited several interesting specimens of extra uterine fœtation, with fœtus, and placental attachments. He also exhibited several specimens of hydro-salpinx.

The meeting then adjourned.

[As the report of the meeting was only received on the 12th inst., we are compelled to hold over Dr. Rowan's paper till next month.—Ed.]

Australian Medical Journal.

SEPTEMBER 15th, 1887.

THE MEDICAL CONGRESS AND ITS RESULTS.

The Intercolonial Medical Congress has held it first and very successful meeting, and the importance of the event can hardly be over-estimated. It may be true that the actual amount of scientific work done was not very great, and the number of delegates from other colonies, who were present in Adelaide, was certainly smaller than might fairly have been expected; but, nevertheless, popular opinion was in accord with professional belief, that the mere gathering in Conference of medical men from New Zealand, as well as from most of the Australian Colonies, afforded reason for hearty congratulation. Perhaps there was wisdom shown by the Executive Committee in not making too strenuous an effort to keep their guests too closely at work. It was better that a few papers should have been left unread, if that was necessary, to allow members to make fuller acquaintance with each other. In that way, rather than by formal discussion, security was attained that the work, so well begun, would be permanent in its results. What these results in their fulness may be it would be vain at present to discuss. There was talk of a federation of the Medical Societies of all the Colonies into a great Australasian Medical Association, and hints were even given that such an Association might have one strong Medical Journal as its organ. It was generally felt, however, that desirable as these objects might be, it was premature to come to any formal resolutions. The more sanguine among the members may have been disappointed that the Congress did not adopt any resolution calling on the Colonial Governments to carry out reforms, either of a sanitary kind, or in the way of improving the relations between the state and the profession. But as no arrangement had been made to formulate properly and discuss fully any such proposals, there was probably greater wisdom shown in deferring action till the Congress had made its footing sure, and established its right to speak with authority. Though it may almost seem as if our congratulations have chiefly been on account of what was not done, we must not be taken as admitting that there were not positive good results of the highest value. Men from parts widely separated, who knew each other only by reputation and in very slight degree, were brought together and made to feel that local celebrity may be a very poor affair, affording no right measure of a man's real knowledge or capacity. Opportunity was thus given to shake off a little of the narrow provincialism which we are all apt to suffer from, and to feel how much every man stands in need of improvement and stimulus. The general feeling was that the event of the Congress was the opening address by the President, which we have pleasure in bringing before our readers in the present number of the *Journal.* In it there were clearly laid down the chief problems, which it will be the task of the medical profession in Australia to try to solve, and it may be that the suggestions of work lying ready to our hand will stir up many of us to a higher sense of our duty as members of a learned profession. At any rate, we are sure that Dr. Verco's comprehensive survey of the position and prospects of Australian medicine will be read with pleasure and profit, and that his utterances will be felt to have struck a good note, and to have given a right tone to the series of meetings which followed. The other addresses were in their respective ways good, and we attempt no comparison of their merits. Two of them, and these not the least important, are printed in full in the present number of the *Journal,* and will be read with interest. These and the other addresses, together with a report of the proceedings of sections, will, in due course, appear in a volume, which the publications Committee has undertaken to prepare, and which will have permanent value and interest.

INTERCOLONIAL MEDICAL CONGRESS.

The meeting of the Congress was held at Adelaide, in accordance with arrangements which have been at various times announced in the Journal. The formal opening took place at the Town Hall, at 3 p.m., on Tuesday, 30th August. After having been entertained at a luncheon by the Mayor, the members assembled in the Council Chamber, the use of which had been granted for the purpose. This meeting was open to the press, and to the public, His Excellency, Sir William F. Robinson, Governor of South Australia, the Chancellor of the University, and the Mayor of Adelaide having seats on the platform, and a large number of the leading citizens being present. The report of the Committee, giving a a history of the steps, which had been taken to bring the Congress into existence, was read by Dr. Poulton, the Secretary, and formally adopted, after which the Governor, who had consented to act as patron, delivered a short address and declared the Congress to be duly constituted.

The President of the Congress, Dr. Verco, then delivered the opening address, which is printed elsewhere.

After votes of thanks had been given to his Excellency the Governor, to the President, and to the Mayor, it was announced that subsequent meetings would be held at the University, for carrying on the ordinary business of the Congress.

The second general meeting of the Congress was held in the library of the University, at 3 p.m., on Wednesday, for the purpose of hearing the address on medicine, by Dr. John Williams, Chairman of the Medical Section. The President expressed his regret that Dr. Williams was unable through illness to be present, and called on Professor Allen, of Melbourne, to read the address, which is printed in the present number of the Journal.

After a few remarks from the President, the Congress separated, to meet again in the various sections, those constituted being *Medicine*, with Dr. Thomas Dixson, of Sydney, as Chairman; *Surgery*, with Mr. T. N. Fitzgerald, of Melbourne, as Chairman; *Gynæcology*, with Dr. Foreman, of Sydney, as Chairman; and *State Medicine*, under the Chairmanship of Dr. Whittell, of Adelaide. We are unable at present to do more than give the titles of papers brought forward, some of them, for want of time, being read only in abstract or by title.

Medicine.—"Fear as a Factor in producing many of the Alarming Symptoms following the Bite of Australian Snakes," by the Hon. J. M. Creed, M.L.C. (Sydney); "Some Remarks upon the South Australian Climates and their Influence on Phthisis," by Dr. Astles (Adelaide); on "Grindelia Robusta," by Dr. Dixson, Lecturer on Materia Medica, at the Sydney University.

Surgery.—"Case of Scrofulous Pyelonephritis, Removal of the Kidney, by Langenbeck's Incision, Lumbar Drainage, Recovery," by Dr. H. W. Maunsell, M.D., Honorary Surgeon of the Dunedin Hospital; "Hydronephrosis, Removal of the Kidney, Recovery," by Dr. Jell, Wellington, New Zealand (read by Dr. Closs.) Demonstration and Illustration, by Dr. Maunsell (*a*) On the Use of Carver's Tools in Hard Cleft Palate; (*b*) A Demonstration on Enterectomy; (*c*) Extroversion of Bladder; (*d*) Removal of Foreign Body from Bladder, by Supra-pubic Operation; (*e*) A Method of Radical Cure of Femoral Hernia.

Gynæcology.—"History and Progress of Ovariotomy in the Australian Colonies," by Dr. Pinnock (Ballarat.)

State Medicine.—"The State, the Practitioner and the Public," by Dr. Stirling (Adelaide); "The Medical Profession in Relation to the State," by Dr. Neild.

On Thursday, 1st September, about fifty members of the Congress visited the Sewage Farm, under the guidance of Dr.

Whittell, who had previously given a short description of the system of the drainage adopted in Adelaide, and the mode of disposal of the sewage. The works were not seen at their best, on account of the wet weather, but, the visitors expressed themselves as highly pleased with the arrangements. The works have been carried out by the Government, the interest of the money invested being collected in the form of rates. Though at first, costly in working, the farm itself now yields a profit of about £900 a year.

At 2 p.m. the Congress assembled in general meeting in the library of the University, the President, Dr. Verco, occupying the chair. It was agreed that the next place of meeting of the Congress should be Melbourne, the exact date being left to the local committee. Some discussion arose with reference to the latter point, some of the members thinking that the date should be next year, on account of the Exhibition then to be held in Melbourne, but the general feeling rather was that a year was too short a time to elapse between the meetings. The nomination of the President-elect was deferred till the following day, that the Victorian representatives might have an opportunity of consulting together.

Mr. Fitzgerald then delivered the address on Surgery, which appears elsewhere. Afterwards meetings of Sections were held, at which the following papers were presented, though all were not read.

Medicine.—"Hydatid Disease of Brain," J. D. Thomas, M.D.; "Tuberculosis," F. W. Elsner, F.R.C.S.I.; "Hydatid Disease" (a case), J. W. Springthorpe, M.D.; "Anæmia," J. Reid, M.D.; "Epilepsy" (cases), J. W. Springthorpe, M.D.; "Dilatation of Stomach," F. W. Elsner, F.R.C.S.I.

Surgery.—"Extirpation of Larynx," W. Gardner, M.D.; "A New Method of Drainage after Abdominal Incision," Mr. O'Hara; "Ophthalmic Papers" (two), Dr. Symons; "On Operation in Compound Depressed Fracture of the Skull," Mr. Muskett.

Gynæcology.—"Oöphoritis and its Relation to Oöphorectomy," Dr. J. O. Closs; "On Shortening the Round Ligaments," J. Foreman, M.R.C.S.; "The Alexander-Adams Operation," W. Gardner, M.D.

State Medicine.—"The Relation of the Profession to the Public," W. L. Bickle, M.R.C.S.

The Congress held its final meetings on Friday, the 2nd inst., assembling in the University Library, at 2 p.m., to hear the addresses on "Gynæcology," by Dr. Foreman; and on "State Medicine," by Dr. Whittell. Both of these were listened to with great interest. Afterwards special business was taken up, the first thing done being the election of Mr. Fitzgerald as President of the next Congress in Melbourne, on the motion of Dr. Creed, of Sydney, seconded by Dr. Gardner, of Adelaide. Dr. Jamieson then proposed the appointment of a publications committee, with full powers in dealing with all papers sent in, whether read or not. The names proposed were those of the President, Dr. Veroo, Professor Watson, Dr. Stirling, Dr. Gardner, Dr. Thomas, and Dr. Cleland. The motion was adopted, the names of Dr. Creed and Dr. Jamieson being added.

Sectional meetings were then held, but on account of the lateness of the hour little business could be transacted.

The following papers were presented :—

Medicine.—"Some Experiments on the Action of the Digestive Ferments," by Jas. Jamieson, M.D.; "Modification of Symptoms in Central Australia," by Dr. J. P. Baker.

State Medicine.—"Cremation," by Dr. Creed; "The Thermal Springs' District of New Zealand," by Dr. Ginders; "Puerperal Mortality in the Australian Colonies," by Dr. Jamieson; "Government Responsibility in Regard to Sight Testing," by J. T. Rudall, F.R.C.S.

In addition to the regular meetings, exhibits of pathological cases and specimens, and of pharmaceutical preparations (by Messrs. Burroughs, Wellcome and Co.) were held, and members were afforded opportunity of visiting the hospitals and other public institutions. The utmost kindness and hospitality were shown to the visitors, not only by the members of the profession in Adelaide, but by many of the leading citizens. There was but one feeling, that the first meeting of the Congress had been not only profitable, but eminently enjoyable, and that the profession all over the Australasian colonies is under obligation to the Executive and Reception Committees for the excellent arrangements which made the whole proceedings so successful.

On the 22nd ult. Dr. W. McGibbon was elected, by a large majority, physician to the Melbourne Benevolent Asylum, in the vacancy caused by the death of Dr. Phillips.

University Intelligence.

MELBOURNE UNIVERSITY.

At the meeting of the Council on the 15th ult., the following were appointed Examiners for Degrees in Medicine and Surgery, for the ordinary and honour examinations of the October Term 1887, and February Term 1888:—Theory and Practice of Medicine, Drs. Williams and Bage; Surgery, Mr. W. G. Howitt and Mr. C. S. Ryan; Forensic Medicine, Drs. Graham and Youl; Pathology, Drs. Jamieson and Moore; Obstetric Medicine, Dr. Rowan and Mr. F. Meyer; Therapeutics, Mr. D. Grant and Mr. W. Snowball; Descriptive and Surgical Anatomy, Mr. F. D. Bird and Mr. G. A. Syme; Materia Medica, Medical Botany, &c., Drs. Bennie and Heffernan; Chemistry, Mr. J. B. Kirkland and Mr. C. R. Blackett.

At the meeting on the 22nd ult., Dr. J. W. Barrett and Mr. G. A. Syme were appointed as Examiners in General Anatomy and Physiology, and Physiological Chemistry and Histology.

At the meeting on the 5th inst., it was decided to call for tenders for the erection of Biological and Physical Laboratories.

Dr. Moloney and Dr. Williams were re-appointed Lecturers on Clinical Medicine, and Mr. Fitzgerald Lecturer on Clinical Surgery, till the end of the year.

The selection of a second Lecturer on Clinical Surgery was referred to the Faculty of Medicine. By a majority the Council declined to take the responsibility of fixing the salary of the Lecturers at £250 per annum, though it was anticipated that with fees that amount would be almost if not quite reached.

OTAGO UNIVERSITY.

The Annual Meeting for conferring degress was held on August 19th. In the absence of Sir James Hector, the Chancellor, Professor Sale presided, and presented the diplomas. The occasion was specially interesting from the circumstance that for the first time, the degree of Bachelor of Medicine was conferred on a student of the University, Mr. W. Ledingham Christie. The address was delivered by Dr. Coughtrey, formerly Professor of Anatomy and Physiology, who gave a history of the founding of the University, and indicated what are its chief needs as a seat of education, and especially as a Medical School. The most important of these were said to be the establishment of a separate Professorship of Physiology, the division of the duties of certain Lectureships, and the improvement of Clinical Teaching.

Hospital Intelligence.

MELBOURNE HOSPITAL.

The quadrennial election of members of the honorary medical staff of the Hospital took place on the 18th ult. The following were the successful candidates, according to their places on the poll:—

Physicians to In-patients.—Dr. P. Moloney, Dr. J. Williams, Dr. J. W. Springthorpe, Dr. J. R. M'Inerney.

Surgeons to In-patients.—Mr. T. N. Fitzgerald, Dr. J. G. Beaney, M.L.C.; Mr. C. S. Ryan, Mr. E. M. James.

Surgeons to Out-patients.—Mr. F. D. Bird, Mr. J. P. Ryan, Mr. J. H. Webb, Dr. W. Moore, Mr. G. A. Syme.

The physicians to out-patients, as already announced, were elected without opposition.

At the meeting of the Committee on the 23rd ult., it was agreed that a letter of thanks should be sent to Mr. T. M. Girdlestone and to Dr. J. Fulton, who had not been re-elected to their former positions as surgeon and physician respectively.

ALFRED HOSPITAL.

At the meeting of Committee on the 19th ult., permission was given to Dr. O'Hara to give instruction in operative surgery to students of the fifth year.

At the meeting on the 26th ult., Dr. Jamieson was re-elected to the position of physician to in-patients.

At the meeting on the 2nd inst., a report was received from a sub-committee of the medical staff, recommending the establishment of a gynæcological department for both out and in-patients. It was decided, after some discussion, not to agree to the formation of the department.

A report was received from the honorary medical staff, recommending the establishment of a clinical school in connection with the Hospital. It was resolved to ask the medical staff to draw up rules for giving effect to the proposal.

WOMEN'S HOSPITAL.

The Annual Meeting was held on the 16th ult., at which the report of the Committee was received and adopted. Afterwards a special meeting was held to consider the adoption of revised bye-laws brought forward by the Committee. As these had not been previously printed and sent to the subscribers, it was resolved to adjourn the meeting for a fortnight.

This meeting was held on the 30th ult., and the proposed alterations were rejected by a large majority. The chief of these was that in future the election of the honorary medical officers should be in the hands of the Committee.

At the Meeting of the Committee on the 2nd inst., a requisition was received from subscribers, asking the Committee to call a special meeting in order to consider proposed new bye-laws, which would provide for the appointment of four additional medical and surgical officers, and separate the medical and infirmary departments more perfectly; besides rendering eligible for honorary appointment to the medical staff of the institution, persons holding degrees of bachelor of medicine and bachelor of surgery from the Melbourne University. The requisition further asked that the meeting should be asked to pass the necessary bye-laws for the election by the contributors of such additional officers, and to determine the date of such election and the period for which the officers should hold office. The Committee agreed that arrangements should be made for holding a meeting in compliance with the requisition.

CHILDREN'S HOSPITAL.

The Annual Meeting was held on the 19th ult. The report stated that the additions to the hospital, giving accommodation for thirty additional beds, would soon be completed, at a cost, including furnishing, of about £8000. It would be necessary to appoint a second resident medical officer; and it was proposed also to receive a small number of paying patients.

Vital Statistics.

The report of the Government Statist on the vital statistics of Melbourne and suburbs, for July 1887, shows that the births of

1192 children, viz., 614 boys and 578 girls, were registered during the month. The deaths registered numbered 563, viz., 301 of males and 262 of females. To every 1000 of the population of the district, the proportion of births was 3·21, and of deaths 1·52.

One hundred and six deaths occurred in public institutions. The number of children under 1 year who died was 109, the total number under 5 years being 167.

In July, as compared with the previous month, under the head of specific febrile or zymotic diseases, deaths from whooping-cough rose from 4 to 8, and those from diphtheria from 6 to 9. Measles, which had not proved fatal during the previous three months, again made its appearance and caused 2 deaths. The mortality amongst child-bearing women was very low during the month, only 4 having died, as against 5 in June, which was also very low. If these numbers be compared with the births registered during the same months, it will follow that 1 death of a mother took place to every 298 children born alive in July, as against 1 to every 250 such children in June.

Local Subjects.

Medical Board of Victoria.—The following gentlemen have registered their qualifications:—William Nicholas Richards, Sydney, N.S.W., M.R.C.S. Eng. 1838; Thomas Cole Wright, Melbourne, M.B. *et* Ch M. Edin. 1868; William McGee, Dublin, L.R.C.S. Irel. 1882, L *et* L. Mid. K.Q.C.P. Irel. 1883; Charles James Rutledge, Warrnambool, L.R.C.S. Irel. 1886. Additional qualification registered:—No. 1335, William L. Mullen, South Melbourne, Ch. B. Melb. 1887. Name of deceased medical practitioner ordered to be erased from the register:—No. 641, Robert Stewart, L.R.C.P. Edin., &c.

Health Officers.—The following appointments have been confirmed: Shire of Ararat—Arthur Bowe, M.R.C.S., *vice* James C. Weld, L.K.Q.C.P., resigned; Shire of Eltham, East Riding—William Kilpatrick, M.B. *Analyst*—City of Sandhurst—Francis Alphonsus Maciver, M.D., *vice* Rudolph Burghard resigned.

Public Vaccinators.—The following appointments have been made: West Melbourne.—William Henry Cutts, jun., M.B., *vice* John Walker Phillips, M.B., deceased; Romsey and Lancefield—George Frederic Wickens, M.B., *vice* E. H. B. Nickoll, L.R.C.S., resigned; Merino and Digby—James Wilson Bett, M.B., *vice* William Jones, M.R.C.S., resigned.

Military Forces.—Surgeon-Major Gerald H. Fetherston, M.D., has been appointed Acting Principal Medical Officer, during the absence of Brigade-Surgeon Fulton, appointment to date from 1st April, 1887. James Innes Fullarton, L.R.C.S. *et* L.R.C.P., Edin., to be a Surgeon in the Naval Brigade on the Unattached List.

Henry Augustus Samson, M.B. *et* Ch. B., has been appointed Junior Deputy Medical Superintendent in the Hospitals for the Insane. Appointment to date from 1st March, 1887.

In connection with the Ormond College Literary and Debating Society, a Lecture on "Dust," with illustrative experiments, was delivered by Professor Masson, on the 13th ult. An account was given of the most recent researches on the subject, the influence of particles of dust, suspended in the atmosphere, in causing mist and vapour, as well as the blue colour of the sky, being explained and illustrated. Mr. J. B. Kirkland gave assistance in carrying out the experiments which passed off without hitch of any kind.

The Government has definitely decided not to repeat the experiment of establishing a fever camp on the grounds of the Alfred Hospital.

At the meeting of the Central Board of Health, on the 9th inst., it was agreed to write to the Chief Secretary, pointing out the desirability of concentrating the noxious trades in some place where the drainage from them would not flow into the Yarra, and suggesting a locality on the Kororoit Creek.

BIRTHS.

Black.—On the 23rd ult., at 6 Alfred-place, Victoria-street, Carlton, the wife of Archibald G. Black, M.B., C.M.--a son.

Flett.—On the 2nd inst., at Barcelona-terrace, Brunswick-street, Fitzroy, the wife of W. Simpson Flett, M.D., of a son.

Iredell.—On the 24th ult., at 3 Esplanade-terrace, St. Kilda, the wife of Dr. Iredell of a daughter.

Kennedy.—On the 14th ult, at Hay, New South Wales, the wife of J. W. Kennedy, F.R.C.S.I., &c., of a son.

Masson.—On the 3rd inst., at Laremount, Bruce-street, Toorak, the wife of Professor Orme Masson—a son.

Skinner.—On the 27th ult., at Beechworth, the wife of Dr. D. Skinner, M.A., of a son.

Walsh.—On the 19th ult., at Wilton, Kew, the wife of William Butler Walsh, M.D., of twin daughters.

MARRIAGE.

Hinchcliff—Jackson.—On the 25th ult., at All Saints', Sandhurst, by the Rev. John Garlick, assisted by the Ven. Archdeacon MacCullagh, Edwin Hinchcliff, M.D., to Annie Jackson, both of Sandhurst.

DEATHS.

Croker.—On the 9th inst., at Beaufort, Henry Dillon Croker, M.R.C.S., aged 73.

Higgins.—On the 19th ult., at his father's residence, Kilenna, Malvern, Samuel Ormsby Higgins, M.B., Ch.B., aged 29 years.

Jones.—On the 1st inst., at Port Fairy, William Jones, M.R.C.S. and L.S.A. Lond., aged 70 years.

M'Farlane.—On the 29th ult., at Hamilton, Teresa Angela, the beloved wife of Dr. C. C. M'Farlane, aged 32 years.

Walsh.—On the 25th ult., at Wilton, Kew, Elizabeth, infant daughter of William Butler Walsh, M.D.

We have received from Dr. J. W. Springthorpe a letter, in which he complains that there was not a sufficiently full report, in the August number, of the Special Meeting to consider his charge against the Committee of the Medical Society. The report was not intended to be full, the custom having rather been to dismiss these ethical questions with the barest mention.

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Original Articles.

ON MOVABLE KIDNEY.

By D. Grant, M.A., M.D. Edin.

Lecturer on Materia Medica, Medical Botany and Elementary Therapeutics, at the University of Melbourne; Physician to Out-Patients at the Melbourne Hospital.

(*Continued from page* 346.)

Diagnosis.

(1) *Symptoms.*—The symptoms produced by movable kidney are exceedingly various, as it affects the gastro-intestinal system, the urinary system, the abdominal vessels, and the nervous system. But first it is important to note that, in many cases, the abnormality seems to be entirely without evil effects, and to produce not even the slightest discomfort. Indeed, it is highly probable that a large number of cases of movable kidney never come under observation at all. In other cases, again, it may exist for years without causing any symptoms, and may then suddenly become, and remain, an active source of irritation. This may probably be accounted for by some lowered condition of general health, or by some local disturbance, such as slight gastro-intestinal catarrh, or by both combined, the former increasing the irritability of the nerve-centres, and the latter determining the special incidence of the irritation. Case No. IV. is an example of this. From 1878 (and probably many years before) to 1883, the movable kidney produced no symptoms, but the general health then fell much below par, the patient became much thinner, so that the kidney had greater range of movement, and the dyspepsia had then become sufficiently pronounced to, so to speak, focalise the irritation on the intestinal functions. I shall first discuss—

(*a*) *Symptoms affecting the Gastro-intestinal Tract.*—These are very various, and include almost all symptoms capable of being produced by the various organic affections of the stomach and bowels. Thus, there may be gastralgia, heartburn, acid eructations, gastric or intestinal flatulence, vomiting (as in Case III., where it was habitual for years), constipation or diarrhœa, &c.; in short, all forms of functional disturbance.

Beginning with the stomach, let us ask *why* mobility of the kidney should give rise to disturbances of the process of gastric digestion, or of the sensations accompanying the process. Now there are two ways in which movable kidney can operate to produce these phenomena—(1) by mechanical interference with the stomach or bowels; (2) by an irritation propagated through the sympathetic nerves. In the case of the stomach, the mechanical factor would, at first sight, appear to be inadmissible, but even here, Bartels, of Kiel, has endeavoured to explain the symptoms by the pressure exercised by the right kidney on the descending portion of the duodenum, causing obstruction of the pylorus, delay in transit of the gastric contents, and consequent dilatation and catarrh. The physical and anatomical objections to this theory, brought forward and clearly put by Oser and Landau, seem to be sufficient to overthrow it, inasmuch as they rest on the apparently sound considerations (1) that an easily movable body like the displaced kidney cannot, from want of a *point d'appui*, permanently compress an elastic cylinder such as the duodenum; (2) that the direction in which movable kidney exercises pressure on the viscera must be the same as that in which it tends to fall, viz., mainly downwards, and very slightly inwards; (3) and strongest, that when the kidney is at its normal level, only its upper half is parallel with the duodenum, so that when it is displaced downwards it falls entirely away from that portion of the bowel, and cannot compress it.

To these arguments I may be permitted to add the results of a few observations made in Case IV., with the object of determining whether there was any real delay in the process of gastric digestion and expulsion of the contents. Adopting the method advocated by Leube for distinguishing between nervous dyspepsia and catarrh, or other organic disease, I applied the following test:—At 8 a.m. a sufficient breakfast was taken, and during the forenoon the patient suffered the usual dyspeptic discomforts, including the peculiar pain in the right half of the abdomen. At 12.30, *i.e.*, four hours after the completion of the meal, I washed out the stomach with the long tube, using a minimum ot cold water to set up the syphon action, and instead of getting remains of undigested food, as I expected, I found that the stomach was absolutely clean and empty, the fluid which was brought up being only what I had poured in, faintly acidulated, presumably by gastric juice. At 1.30 p.m., lunch was taken (consisting of meat, bread and butter, and claret), and at 5.30, on again washing out, I got precisely the same results. This procedure I repeated, with the same results, on three different days, and on all these occasions, it is to be noted, the patient suffered from symptoms which had been attributed by a physician of great ability to gastro-duodenal catarrh, with slight gastric dilatation. Now, the completeness and rapidity with which the gastric digestion was performed seem to negative emphatically the presence of either catarrh or dilatation, and to show that their aid is not necessary to explain the gastric symptoms of movable kidney. The explanation is to be sought, not in a mechanical compression of the duodenum, but, I believe, in a disturbance of innervation, *i.e.*, movable kidney produces its gastric manifestations through the sympathetic nerves, either by disturbing the secretory process, or, as seems to have been the case in this instance, by causing hyperæsthesia of the mucous membrane. So far from retention of the gastric contents, and consequent dilatation, resulting from movable kidney, I believe that it is much more likely to cause premature expulsion of the contents of the stomach, in consequence of the hyperæsthesia and increased reflex excitability. But the dyspepsia of movable kidney is undoubtedly in the main a nervous dyspepsia, and chiefly one of hyperæsthesia.

A very peculiar feature in regard to it is the localisation of the pain. In Case IV., there has always been pain almost immediately after meals, in the right half of the umbilical region, about an inch to the right of the umbilicus; and in any case where pain in this apparently irrelevant position was a prominent symptom, I should regard it as presumptive evidence of the presence of movable kidney.

Taking next the intestinal tract, we find that the symptoms include constipation, diarrhœa, each of these alternately, flatulent distension, the passage of mucus, &c. Here again, catarrh is described as being almost constantly associated with movable kidney (Landau, &c.), but as the evidence of its presence appears to be clinical, rather than pathological, and to rest on the interpretation of the symptoms just mentioned, it is possible that they may, equally with the gastric disturbances, own a functional cause. It is difficult to see how movable kidney of itself could set up intestinal catarrh, but probably it may cause considerable venous stasis, by interference with the mesenteric vessels. This, if long-continued, may easily lead to much serous infiltration of the submucosa, and a pseudo-catarrhal state of the mucosa, and a condition of this kind may give rise to symptoms resembling those of true intestinal catarrh.

Another symptom, which was manifested by my Case III., and which also occurs in a case mentioned to me by Dr. Lauder Brunton, is the passage of mucus by stool, and this would appear to be a characteristic catarrhal symptom. But I think, that in the absence of the direct pathological evidence of true catarrh, the intestinal disturbances of movable kidney are best explained by (1) venous congestion from interference with the mesenteric veins, (2) reflex disturbances of secretion, (3) active hyperæmia from vaso-motor paralysis.

And this leads me to consider the occurrence of constipation and diarrhœa in cases of movable kidney. Why do we find sometimes one and sometimes the other? On looking at the records, the fact would appear to be that in cases arising gradually, and in chronic cases, constipation is the rule, while in traumatic or suddenly-produced dislocation, and in the acute exacerbations to which chronic cases are liable, diarrhœa occurs. Thus Roberts narrates acute cases (traumatic) in which diarrhœa was the chief symptom. And this distinction gives, I think, the key to the explanation. In chronic and slowly-arising cases, the nerve-centres become gradually habituated to the irritation, which therefore produces its effects only in a minor degree, and is expended in *stimulating* the inhibitory intestinal nerves and the vaso-motor nerves. This reflex stimulation will cause (1) diminished vascularity, (2) diminished peristalsis, and will thus doubly tend to produce constipation. In an acute or traumatic case, on the other hand, or in an acute exacerbation of a chronic case, the nerve-centres have either not had time to become hardened, or the irritation is for the time in excess of that to which they have adapted themselves, and the result is a degree of irritation sufficient to *paralyse* the vaso-motor nerves and the inhibitory intestinal nerves. This will lead to (1) increased vascularity, (2) increased peristalsis, and will therefore produce diarrhœa. As a physiological analogy of an irritant causing vaso-motor and inhibitory paralysis, I may quote the effect of emotion (a psychical irritant) in causing vaso-motor paralysis of the head and neck, and paralysis of the cardio-inhibitory nerves, and thus producing blushing and palpitation. Here the irritation starts from the cerebral hemispheres, and is propagated to the vaso-motor centre and vagus roots in the medulla; in the case of the kidney it may be regarded as starting from that organ, being conducted to the abdominal sympathetic centre, and there paralysing vaso-motor and muscular-inhibitory impulses.

This view of the mode in which renal mobility may affect intestinal function, is indirectly supported by the authority of Lauder Brunton, who found that in many cases of ovarian tenderness, one drop of laudanum acted as a purgative. (In one case ½ minim acted as a brisk purgative.) These cases he explained by the theory, that the constipation was due to reflex irritation of the inhibitory intestinal nerves by the tender ovary, and that the opium removed the inhibition.

Another point with regard to constipation is, its *effect* on the symptoms of movable kidney. Roberts says, that "accumulation of fæcal matter in the large intestines invariably aggravates the inconveniences of movable kidneys." Now, though this is true as regards great accumulation, it is not invariably true as regards a moderate degree of constipation, for a moderate fulness of the cæcum and ascending colon, tends to maintain the right kidney in its position, and the same is true of the splenic and sigmoid flexures on the left side.

The question also arises, whether constipation can be mechanically produced by pressure on the large intestine. Roberts recognises this as an effective cause, and Landau quotes a case reported by Rollet, in which obstinate constipation, associated with movable kidney, was attributed to enterostenosis, caused by pressure on the ascending colon. Here again, as in the case of the alleged compression of the duodenum, the physical conditions seem opposed to the possibility of any effective pressure being exercised by a movable kidney on the large intestine; but this case differs from that of the duodenum in this respect, that the line of movement of the kidney in its descent is such as to permit pressure on the colon, and that the contents of the intestine are here moving against the force of gravity, not with it, as in the vertical part of the duodenum. In this case, therefore, the possibility of mechanical compression, at least in the case of right movable kidney, may be admitted.

An extremely interesting point with reference to the intestinal symptoms of movable kidney is, the very peculiar localisation which they may present. This has been notably exemplified in

Case IV., on various occasions when an unusual amount of exertion (aided perhaps by some indigestible food), has brought on an acute exacerbation. On these occasions the patient usually wakes up about 2 a.m., in the following condition:—stomach empty, quiescent and comfortable, general area of abdomen equally so, but the area included in the right iliac and lumbar regions, and the right half of the umbilical region, affected with a peculiarly distressing aching pain, with palpable peristalsis and much "squirming." The pain has its maximum point one inch external to the umbilicus, and the peristalsis and squirming are limited strictly to the area named, the other regions of the abdomen being in every respect perfectly normal. In the affected area the condition is sometimes so marked that coils of intestine stand up, causing distinctly visible prominences. The peculiar point, with regard to this condition, is its strict limitation to a topographical area. The parts of bowel affected include both small and large intestine, and the limitation of the spasmodic contraction does not appear to be determined by anatomical or functional *continuity* of tissue, but by mere topographical *contiguity*. Why this should be so it is difficult to say, but possibly an explanation may be found by appealing to the principle that structures developed from the same embryonic segment retain peculiarly intimate reflex connections in the adult. This, however, only leads to a further difficulty, viz., why, under these circumstances, or, indeed under any circumstances, should movable kidney cause severe intestinal irritation, without in the least degree affecting the bladder? And this brings us to the consideration of:—

(*b*) *Symptoms affecting the Genito-urinary Tract.*—The functions of secretion and excretion of urine are so often unaffected in cases of movable kidney that many authors, including Rosenstein, Henoch, and Trousseau, deny the influence of renal mobility on renal function. Thus, Trousseau says:—"Neither the secretion of urine nor micturition are in the slightest degree influenced by the kidney being movable." Now, though this is true in a large number of cases, yet there are others in which much urinary irritation is set up, and others in which, without obvious symptoms, the quantity and quality of the urine are altered. And this appears to be only a necessary consequence of the anatomical conditions. When the kidney descends, it does not fall vertically in such a way as to maintain the parallelism of the structures entering the hilus, but it moves in "the circumference of a circle, whose radius corresponds to the length of the renal vessels" (Ebstein). In doing so, the body of the kidney undergoes a rotation round a horizontal axis, the effect of which is to produce a certain torsion and flexion of the ureter and vessels. The lower end of the organ falls downwards and inwards, and points, when fully dislocated, slightly backwards; the upper end is inclined upwards and outwards, and tends to fall forward, and the result of this alteration in position is that the renal artery is dragged downwards, so as to lie over the renal vein near its entrance into the vena cava, there compressing it, while the ureter is sharply flexed and compressed at its exit from the pelvis, by being dragged forward against the vessels. The consequence of these two changes must be (1) a certain degree of venous stasis in the kidney; (2) a certain amount of obstruction to the flow of urine from the pelvis. The former, in any marked case, must tend to cause diminished secretion of urine; the latter will cause diminished excretion, and tend to produce some amount of hydronephrosis. When these conditions are present in an unusual degree, in consequence, perhaps, of some violent exertion causing unusual displacement, the so-called "incarceration of the kidney" is said to be produced. The symptoms of this condition usually occur suddenly, sometimes without evident cause, and include the following:—violent pain in the abdomen, great tenderness, especially in the neighbourhood of the kidney, distension, nausea or vomiting, great diminution or suppression of urine, and swelling of the tumour. The attack is frequently ushered in by rigors, followed or attended by fever, and this has often led to the diagnosis of peritonitis, as in cases quoted by Trousseau. These symptoms, when well-marked, also present a very close resemblance to those produced by a calculus becoming impacted in the ureter, and hence there are two main theories to explain the phenomena:—(1) Dietl, Rollet, and Ebstein support the view that the symptoms are actually caused by inflammation and exudation into the sub-peritoneal connective tissue, in consequence of which the kidney becomes incarcerated, and its vessels and ureter strangulated. (2) Gilewski "sought to explain the symptoms of incarceration on the theory of an acute hydronephrosis and pyelitis. He explains the production of the latter by assuming that when the kidney is twisted upon its own axis, the ureter is compressed, and in this way retention of urine, pyelitis, and their attendant manifestations are produced. Gilewski saw improvement set in, simultaneously with the discharge of a muco-purulent urine."

Now, I have not had any experience of "strangulation of the kidney," but, so far as I can judge, the symptoms are sufficiently accounted for by regarding them as a simple intensification of the symptoms seen in the ordinary acute exacerbations, or in a case arising acutely. Here again, I would attribute variations in the acuteness of the symptoms to variations in the intensity of the irritation, without appealing to inflammation or mechanical obstruction. The ordinary irritation is sufficient to affect a certain area of nerve-tissue with sufficient intensity to cause the ordinary symptoms; an amount of exertion slightly in excess of what is customary, may increase the irritation sufficiently to produce an acute exacerbation, manifesting itself by diarrhœa, increased pain, and peculiarly localised intestinal disturbance; and if the exertion be sudden and violent, it seems reasonable enough to suppose that the symptoms may be greatly intensified, until they produce faintness and collapse, similar to those seen in impaction of a calculus. Even in the case of impacted calculus, it is not the fact of the ureter being blocked that gives rise to the symptoms of agonising pain, nausea, and collapse, but the intense irritation of nerve-terminations, setting up a violent nerve-storm throughout the whole abdominal sympathetic. That this is so, is shown by the facts (1) that the symptoms arise at once, before obstruction has been established; (2) that the symptoms are proportionate to the angularity of the calculus, not to its size, and therefore not to its obstructing power; (3) that a much greater amount of obstruction, slowly set up, may exist without causing similar disturbances. And if this be true with regard to calculus, it appears unnecessary to invoke the aid of mechanical obstruction to account for the symptoms known as "strangulation of the kidney." The sudden strain or violent exertion causes violent dragging of nerves and an intense sudden pain, and the rest of the phenomena are accounted for by the general disturbance of innervation so set up. Even the great diminution of urine is easily explained by the lowered blood-pressure in the glomeruli, due to either (*a*) vaso-motor stimulation of the renal arterioles, or (*b*) vaso-motor paralysis from shock in very acute cases, causing a general lowering of blood-pressure. Another analogous case, in addition to that of impacted calculus, is the case of the symptoms caused by a blow on the testicle, which often produces collapse and faintness. Here there is no question of obstruction or other mechanical change, but merely of a profound impression on the nerve-centres. At the same time there is one symptom, viz., the alleged occurrence of hæmaturia in cases of "strangulation," which seems to demand a mechanical explanation; but this, I think, is sufficiently provided by the increased venous compression which the violent strain produces. Besides, an exudative perinephritis would not produce this symptom.

I therefore believe that all the symptoms of so-called "strangulation of the kidney" can be accounted for like the ordinary symptoms of the movable kidney, by the supposition of a violent disturbance of innervation, excited by a sudden and extreme increase in the intensity of the irritation caused by the kidney; this cause being reinforced by an increase in the venous stasis.

In connection with the genito-urinary symptoms, I may mention that in Case IV. (1) the secretion of urine is most copious in the recumbent position; (2) for several years (1875–1878) the patient suffered from intermittent albuminuria. I do not mean to imply any relation between the latter symptom and the mobility of the kidney, but possibly the renal irritation may have contributed to its production by the nervous and vascular instability which it produced. Albuminuria has never been present since the movable kidney became an active cause of symptoms.

(*c*) *Symptoms due to Interference with the Great Vessels.*—These consist of œdema of the lower extremities, &c., caused by compression of the inferior vena cava. Thus Rayer reports a case in which the vena cava was actually obliterated in consequence of this pressure.

(*d*) *Symptoms manifested in the Nervous System.*—Strictly speaking, the majority of the symptoms already discussed are produced through the nervous system, but there is a whole complex of "nervous symptoms" properly so-called, partly psychical and partly sensory. The psychical disturbance usually takes the form of depression, amounting it may be, to actual hypochondriasis. The accidental discovery of a tumour in the abdomen, especially if, as is generally the case, it has been preceded by obscure pains and disturbances of digestion, is quite sufficient to account for such a state of mind, and more especially so, if the nature of the tumour be overlooked by the medical attendant. In my Case I., where the medical attendants denied the existence of any "tumour," its presence was nevertheless sufficiently obvious to the patient, and was a source of great anxiety to him, which was at once dispelled on the nature of the "tumour" being explained.

The sensory symptoms include a peculiar sense of discomfort in the abdomen, a feeling of fulness, weight, and pressure on the side affected, and frequent dragging pains of an obscure kind. There is a peculiar gnawing pain in the neighbourhood of the umbilicus, which is especially characteristic, and at the same point often an extraordinary feeling of "something moving" in the abdomen, as it is frequently described. This I find to be caused by minute peristaltic contractions, rendered unduly perceptible, doubtless, by the hyperæsthetic condition, associated with movable kidney. These symptoms, when described by women, and not understood, are often sweepingly set aside as "merely hysterical," but they undoubtedly have a real objective existence. This is sufficiently shown by the way in which rest relieves, and exertion aggravates them.

Other nervous symptoms are:—various reflex neuralgiæ, affecting the lower limbs, the lumbar region, the abdominal and intercostal nerves. Thus, in my Case III., pain in the leg was a prominent feature; and in Case IV., after walking much, the right leg becomes fatigued long before the left, and the feeling of weakness is accompanied by a peculiar aching in the thigh.

(To be continued.)

CHILDBIRTH MORTALITY IN THE AUSTRALIAN COLONIES.

By James Jamieson, M.D.

Presented to the State Medicine Section of the Intercolonial Medical Congress.

The question of the high rate of mortality among childbearing women in these colonies, especially as regards Victoria, is one to which I have repeatedly directed attention. I may be allowed to refer to papers, on different aspects of the question, in the *Australian Medical Journal* for January 1879, and the *Australasian Medical Gazette* for July 1882. In both of these communications my special endeavour was to arrive at some conclusions as to the prevalence and causation of puerperal fever; and a large amount of statistical data was collected, as a help toward that end, though much of it was general enough to admit of use for other purposes.

In this paper there will be no attempt to discuss obscure questions in pathology. My object is the less ambitious, but perhaps not less useful one, of seeking to discover in how far, judging by results, we have profited by the improvements introduced of late years into the practice of obstetrics, and to make such practical suggestions as may seem necessary. It was my original intention to take the materials from the mortality returns of the chief cities; but, on further consideration, it seemed better to extend the field of observation to the various colonies as a whole. Even then the data will be none too large for purposes of safe comparison. For the same reason I have not considered it necessary to divide the returns of deaths into those from puerperal fever, or "metria," and those from all other causes directly connected with childbirth. Even if the data had been more extensive, it is unfortunately the case that the registration returns are not always to be relied on for distinguishing these two classes of cases. And further, it is to some extent doubtful whether the returns of death, from all causes directly connected with childbearing, can always be depended on. Unless very careful scrutiny is made, errors creep in, allowing of deaths being included under other headings, which ought properly to be ascribed to childbirth causes, with the result that the mortality from these latter, as shown in the returns, is put lower than it actually is. And further, it is doubtful whether the precautions taken to secure accuracy are the same in all the colonies, and therefore any comparison of one with the other may be of comparatively little value. I do not propose to make any such comparison, but rather to take the figures for the chief colonies as a whole, so as to get a basis of comparison large enough to be safe, and free from local peculiarities or defects. With the help of the figures thus obtained, the childbirth mortality in these colonies can be compared, at periods sufficiently far apart, for the purpose of discovering whether there has actually been any such improvement in the mortality among lying-in women as might have been fairly expected, in view of the improvements in doctrine and practice which have of late years been introduced. I propose to follow this up by a similar comparison of the mortality returns in England, also at periods equally far apart, in order to discover how we stand when contrasted with the mother country.

Before making the comparisons proposed, it may be interesting to present a table showing the numbers of births and of the deaths from metria and "accidents of childbirth," separately and in combination, in Victoria for a series of years, with the view of showing the great fluctuations in the mortality from year to year, both in the totals and in that from each class. I select Victoria for the purpose, not only because I am most familiar with the figures referring to it, but because I believe the system of registration to be more perfect than in any of the other colonies.

TABLE I.

Showing the number of births and of deaths from metria and child-birth in Victoria, 1871–85 :—

Year.	Births.	Metria.	Child-birth.	Total.
1871	27,382	12	90	102
1872	27,361	16	123	139
1873	28,100	44	127	171
1874	26,800	109	142	251
1875	26,720	83	154	237
1876	26,769	48	117	165
1877	26,010	42	131	173
1878	26,581	49	149	198
1879	26,839	38	123	161
1880	26,148	20	111	131
1881	27,145	78	155	233
1882	26,747	59	117	176
1883	27,541	43	115	158
1884	28,850	72	131	203
1885	29,975	62	106	168

The fact that there have been such fluctuations in the mortality, with a birth-rate varying little through a series of years, is sufficient to show the necessity for obtaining tolerably large and comprehensive data before attempting to come to any conclusions. I have therefore collected, with a view of comparison, the figures for two periods of five years each, including the births and the deaths from causes connected with child-bearing, registered in Queensland, South Australia, and Victoria. I have been unable to include the figures for New South Wales, because I could not obtain published returns earlier than 1875, or later than 1884. Not being able to give the figures for the whole of the years in each period, it seemed advisable to leave them out altogether.

In the following tables are given the numbers of births, and of deaths from all child-bearing causes in the colonies first mentioned, for the periods 1871–75 and 1881–85.

Table II.

Showing the births and deaths in 1871–75 :—

	Births.	Deaths.	Rate per 1000 births.
Victoria	136,363	900	6·60
South Australia ..	36,389	166	4·56
Queensland	29,279	147	5·02
Total	202,040	1213	6·0

Table III.

Showing the same for 1881–85 :—

	Births.	Deaths.	Rate per 1000 births.
Victoria	140,258	938	6·69
South Australia ..	56,618	284	5·02
Queensland	48,979	297	6·06
Total	245,855	1519	6·18

From these figures, which probably are large enough, and extend over long enough periods, to permit of fair comparison, it appears that, in the colonies referred to, not only is the mortality among child-bearing women high, but also that it was slightly greater in the more recent period. Though I have left New South Wales out in making the calculations, it may be right to state that, in the four years 1881–84, the death-rate was only 3·92 per thousand. I venture to think, however, that such a marked difference from the condition found in the other colonies is best explained by some imperfection in the registration system, though where the fallacy comes in I do not venture to say.

Having thus discovered, as exactly as possible, the rate of mortality among child-bearing women in the Australian colonies, it is necessary next to compare the condition so found with that of England. Taking the same periods, I find, from the data supplied in the Annual Reports of the English Registrar-General, that the rate of mortality from all child-birth causes per 1000 births was 5·49 in the period 1871–75, and 4·94 in the period 1881–85.

Not only, therefore, is the average mortality lower in England than in these colonies, but there is also a distinct improvement in the rate in the second period. It should be borne in mind, also, that in 1881 a system of special inquiry into the true cause of death, occurring in women after delivery, was instituted, with the immediate effect of bringing up the rate, in 1881–85, to as much as 1 per 1000, when compared with the years 1877–80. While, therefore, the rate for 1881–85, as given above, may be taken as approximately correct, that for 1871–75 is certainly considerably under the correct figure. The effect of this, of course, is to make the reduction in the death-rate which occurred between these periods much greater than is shown by the figures.

There may also have been in all the colonies, as there certainly has been in Victoria, an increase of accuracy in these returns of late years; but the general fact may be taken as established, that not only is the death-rate lower in England than in Australia, but that it is tending downwards there, while there are no indications of any such tendency here.

It also may safely be asserted that a high rate of mortality among lying-in women always indicates an insufficient average measure of care or skill on the part of those who have the management of cases of labour. The English Registrar-General showed this long ago, by comparing the low rate of that mortality in London, where even the poorest women can obtain skilled attendance, with the high rate in North Wales and similar districts, where labour cases are chiefly conducted by ignorant old women. It is possible, however, to go a step further, and insist that a high death-rate, following delivery, is specially due to want of care in guarding against infection at or soon after delivery. This is tantamount to saying that any such persistently high rate of mortality is specially owing to the prevalence of puerperal fever, that again being due to neglect of those antiseptic precautions, whose value has been established by the saving of life which has followed their careful adoption in most of the lying-in hospitals of Europe. That puerperal fever has a large share in producing the high rate of mortality in Victoria is shown by the figures given in Table I., and it is beyond doubt that the deaths assigned to that cause are, to a considerable extent, below the actual number. If anything in the field of practical medicine can be taken as proved, it is that puerperal fever is a preventible disease, and the means of prevention at our disposal are both more reliable and more easily accessible than in the case of almost any other of the infectious diseases. But if this be so, it is plain how heavy must be the reproach resting upon us, if our utmost endeavours are not used to lessen its prevalence, and in proportion to lower the death-rate among lying-in women as a whole. This can be done in part by the careful management of each case in all its details, but particularly by the scrupulous carrying out of those precautions against the possibility of conveying infection, which have now been clearly formulated. But unfortunately, it is not sufficient that medical men should exercise every care in the cases under their own charge. Very many women are attended by midwives or nurses, often possessed of little or no training or knowledge, and so long as this goes on, it is vain to expect a large measure of improvement in the mortality among women after delivery. That careful training and constant supervision of the work of midwives may be depended on to produce good effects, has been shown in the Duchy of Baden, where, as in most German countries, much of the work of attending women in labour falls to them. As the result of this training and supervision, and the obligatory use of antiseptic precautions prescribed by the authorities, the number of deaths in Baden fell from 530 in 1875, to 415 in 1880, to 380 in 1881, and to only 225 in 1882. What has been accomplished there could be done elsewhere, and surely in Australia. But even the universal adoption of such antiseptic and other precautions by medical men will not avail, unless something is done to secure that midwives and nurses, who attend such a large proportion of all cases, are compelled to submit to registration, with adequate training and certification of competence as a preliminary. It may be impossible to prevent some measure of irregular practice, even after the adoption of a system of compulsory registration; but, at least the standard of qualification would quickly be raised, and the public would be in a position to judge between the qualified and the unqualified. If, by the adoption of the measures here proposed, the mortality among lying-in women could be reduced by one-third, no very extravagant expectation, there would be an annual saving, in Australia, of seven or eight hundred lives, and these lives of the very highest value. It cannot be too strongly urged on the Governments of the various Colonies that there is necessity for the adoption of

Legislative measures for the compulsory registration of women practising as midwives, and for the formation of boards of examiners, with power to give certificates qualifying for registration. Unless these steps are taken, I can see no prospect of any great or early improvement in the death-rate after delivery, which is now so high as to be a discredit, if not a disgrace, to our Australian civilisation.

ON A CASE OF VESICAL CALCULUS.

By Dr. Rowan.

[**Read before the Victorian Branch of the British Medical Association at the July meeting.**]

This is one of the most interesting cases I have ever had to treat, and I therefore trust the brief account I shall be able to give may not prove altogether uninteresting. The early history of the case is somewhat vague, and the subsequent history is also somewhat masked, but, on the whole, I think the facts are pretty accurate.

L. E., æt. 32, single, native of Tasmania; complexion fair, habits and mental conditions active; was quite healthy in early childhood, but can recollect suffering from almost constant pain in the back and loins when about five years old, and subsequent to that date had intermittent pains, generally brought on or increased by violent exercise. When about 12½ years old the first catamenial flow came on, and lasted about three days, from that time until the sixteenth year she menstruated regularly and without much pain, except during the latter months of the sixteenth year, when each flow was marked by a greater degree of suffering than she had ever experienced before. About the end of the sixteenth year she had a severe attack of laryngeal inflammation, accompanied by lung troubles, which continued for several weeks, and then left her much reduced in strength. When the acute symptoms of the chest and laryngeal troubles subsided, she was unable to stand or walk, and in addition, suffered from retention of urine, accompanied by constant pains in the bladder, back, and loins, of a most distressing character. All these symptoms continued until the end of the nineteenth year, when the retention disappeared and was replaced by incontinence of urine, the menstrual flow had also disappeared during the latter portion of the 3½ years she had remained in bed, and only re-appeared in December 1886, after an absence of nearly thirteen years. The treatment during the 3½ years mentioned was mainly directed to the urinary troubles, but there was an operation performed upon the neck of the uterus, probably metrotomy, but she never derived the slightest benefit from any treatment she received, either medicinal or surgical.

On the 8th of October, 1886, she came to my rooms, but was unable to undergo an examination, and returned in the evening, when she was admitted for examination the following morning. I had her put under chloroform, and then discovered the exact nature of her ailment. The vulva and entrance to the vagina had extensive excoriations, in addition to being swollen and unhealthy from the constant irritating effects of the urine trickling over them for years. The vagina admitted the finger with a degree of difficulty, as its walls were much thickened and swollen. The uterus was small, thin, and retroverted, and admitted the uterine sound about two and a quarter inches. About one inch and a quarter from the vaginal orifice the finger impinged against a hammer-shaped body, which was hard and rough; the vaginal canal was full of mucus and decomposing urine of a most offensive character. The meatus was patulous and partly filled by a hard and somewhat pointed projection, evidently the other end of the body felt in the vagina. Above and behind the pubis there could be felt a tumour of stony hardness, and about the size of an emu's egg. Pressure, applied over the tumour at this particular place, revealed the fact that the projecting parts in the vagina and meatus were merely the lower portions of the tumour felt in the hypogastric region.

The diagnosis under such circumstances was far from difficult, but the proper line of action to be adopted in order to remove the gigantic calculus, for that is what it was, required some careful thought. There were three courses open—(1) to crush and remove; (2) to do the supra-pubic operation; and (3) to divide the septum between the neck of the stone and the meatus. The first method seemed to me to be surrounded with difficulties and dangers of an unusual character, and therefore the idea of crushing was abandoned. It must be remembered that the bladder was completely filled with the stone, and that its walls were thickened and unhealthy, and therefore highly liable to extensive rupture, either through pressure from without, exercised in order to fix the stone whilst it was being drilled, or from the splintering which must have necessarily ensued in breaking down and removing such a large foreign body. The second or supra-pubic method was never seriously entertained, as I could see no advantage in taking it out in that way. The posterior wall being already extensively injured, I came to the conclusion that a little more injury was of little or no consequence, and therefore decided upon the third method of removal.

On the morning of the 11th October, I had the rectum, which was prolapsed from the constant straining of many years' duration, well washed out, also the vagina, and then proceeded to remove the calculus. The patient took chloroform very badly at first, and gave a great deal of trouble before she was got thoroughly under, but eventually settled down sufficiently to allow the operation to proceed without interruption. The septum or neck of the bladder was completely divided from the meatus back to the neck of the stone, when the finger could be passed almost round the main body in the bladder, where some pretty firm attachments were discovered, and had to be broken down with the greatest care. The difficulty now began, and what I had deemed an easy procedure, became most difficult. I first tried to extract with the fingers, but soon found that I could not, and then I tried some large and powerful stone forceps with a like result, and eventually, had to try a small pair of midwifery forceps in order to effect delivery. When extracted, I was shocked to find that I had lacerated the perinæum, almost to the line of the sphincter, and immediately stitched it up in the ordinary way. The next step was to secure the freshly cut surface in the neck of the bladder, leaving the large opening through which the neck of the stone projected as a drain, and with the intention of closing it by subsequent operation.

In about ten days, I discovered that every suture I had used in the neck had ulcerated through and come away in the discharge, leaving the cavity of the bladder and vagina as one large cloaca. The only thing to be done, under the circumstances, was to try and improve the patient's general health, and at the same time to attend strictly to cleansing, and the constant use of lotions calculated to set up healthy action in the bladder tissues.

The patient's condition rapidly improved, and the bladder took on a more healthy appearance, so that I was able to perform the necessary operation on the 4th of November. A figure of 8 catheter was kept in the bladder for about a fortnight, when I found almost complete union all along the line.

The treatment during the first fortnight was mainly directed towards keeping the bladder free of urine, and in addition, to assist the extensive raw surface to contract and heal where the stone had been irritating for so long, and for this I had the bladder washed out three times daily, and often during the night as well, with a weak lotion of argentum nitrate, and subsequently, with boracic acid.

In December, the patient left for home apparently in good health, and free from any of the discomforts she brought with her. I saw her in the end of January, and was gratified to find that she had gained nearly two stones in weight, could eat and sleep well, and was quite free from pain of any description. She was also able to retain her urine for two and sometimes three hours at a time, and then pass it with ease and comfort. Her menstrual flow had returned after an absence of thirteen years, and the prolapsed bowel had also improved so far, that it gave rise to little or no inconvenience.

I need not say how delighted I was with the results, indeed, nothing could be more pleasant or satisfactory, and I could not help congratulating the patient and telling her what my feelings were.

About the middle of March I had a report of a most unsatisfactory character, and telegraphed for my patient to return to Melbourne, which she did in a few days' time. On her arrival I discovered that she was again almost unable to retain her urine, and suffered greatly from the passage of quantities of mucus, almost constant vomiting, lumbar pains, and constipation. Every attention was paid to diet, and medicines were given for the relief of the constipation and sickness, various soothing liniments were applied over the seat of pain in the back, hot hip baths and mild galvanism were used in turn, but without any marked effect so far as the sickness was concerned.

In the meantime, I had made an examination of the bladder, and discovered a leakage at the upper angle of the old original fistula, not very extensive, but sufficiently large to necessitate an operation for its closure. The meatus was also more patulous than I expected to find it at that stage, and there were the most evident proofs of chronic cystitis. Under the circumstances, I decided to relieve the cystic trouble already in existence before doing anything more, and accordingly had the bladder washed out frequently during several days and nights, until nearly all traces of mucus had disappeared.

The patient was chloroformed on the 4th of April, and the opening in the vaginal wall closed in the ordinary manner. A V-shaped portion of the lower and posterior parts of the meatus was also bared and brought together with horse-hair sutures, leaving an opening just large enough to admit a No. 12 catheter.

During the four days following the operation, everything went on most satisfactorily, but on the morning of the fifth day, severe vesical pain set in, followed in a few hours by alarming hæmorrhage, which continued on and off for several days, and then gradually stopped. The general condition all this time was far from re-assuring, the strength had suffered materially, and I became most anxious regarding the probable result. The pain had lost much of its acuteness, but it was still sufficiently severe to necessitate the employment of opiates in the form of morphia suppositories. The pulse could barely be felt at the wrist, and the temperature remained stationary at 96·2°. The tongue became dry and brown, accompanied by intolerable thirst and sighing respiration. Stimulants had to be given very freely in every possible form, and hot-water bags applied not only to the feet and legs, but round the body as well, until reaction set in on the 9th day after the operation. The self-retaining catheter had to be removed, and the water drawn off in the ordinary way between the 5th and 9th days, and the bladder had to be frequently washed out with warm opiate lotion, in order to prevent the possibility of decomposition and absorption. The strength began to improve slowly, and the temperature gradually crept up to the normal point, but never beyond.

On April 24, he last of the horse-hair sutures came away, leaving the meatus perfect, both as regarded size and condition.

On May 7, I removed the silver sutures from the vaginal opening, and was delighted to find it perfectly healed and water tight.

The subsequent progress of the case was somewhat interfered with, on account of the patient's disinclination to take nourishment in any form, and consequently I was obliged to have her fed by the bowel for a considerable time, in order to keep the powers of life going. I may say that this was a return of a very old trick, as she had during former years gone for weeks at a time without food. I have since discovered that a very strong current of hysteria exists in her family, and that one sister suffered from

it so severely that she almost lost her life on its account. Had these facts been known to me when she returned to my house in March, I should have been much happier in mind, and less inclined to attribute, what must have been nothing more than hysterical vomiting, to reflex kidney irritation. I first thought the lumbar pains complained of, and the hæmorrhage which set in on the fifth day of the operation, were most probably due to the dislodgement of a calculus in the kidney, but I now feel quite certain that nothing of the kind existed, and that the bleeding was produced by the point of the catheter during one of the attacks of vomiting. You will, no doubt, remember that the lining membrane of that portion of the bladder which came in contact with the base or large end of the calculus was quite raw and unhealthy at the time of the first operation, and you may also recollect that certain symptoms of cystic inflammation existed when she returned in March, and therefore, it may, I think, be taken for granted that a more or less raw surface was still present, and if so, I can easily understand how the presence of a comparatively sharp foreign body like a silver catheter, might under such circumstances cause ulceration and hæmorrhage.

I think that the foregoing facts will go far to prove that the case was what I stated at the beginning of my paper, and I trust the imperfect account I have been able to give, may have had the effect I desired.

The accompanying photograph gives a very good representation of the calculus, although rather less than natural size.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, SEPTEMBER 14TH, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. J. P. Ryan, Allen, Graham, Couper Johnston, Neild, Honman, Molyneux, A. S. Aitchison, Howard, G. A. Syme, J. W. D. Hooper, Jamieson, Brett, Moloney, Fishbourne, Joyce, and A. A. Fletcher.

The Senior Vice-President, Dr. J. P. RYAN, occupied the chair. Dr. Maunsell was present as a visitor.

The minutes of the preceding ordinary and special meetings were read and confirmed.

Presentation to the Library.

The Hon. Secretary reported that Messrs. Smith, Elder and Co. had presented to the Society a set of Von Ziemssen's Handbook of General Therapeutics, in seven volumes, at the request of Dr. Elsner. Acknowledgments had been sent to the publishers and to Dr. Elsner.

New Members.

Dr. H. W. Bryant, L.R.C.P. et S. Ed., L.F.P.S.G., L.M., of Williamstown, was elected a member of the Society, on the nomination of Dr. A. S. Aitchison, seconded by Dr. G. A. Syme. Two gentlemen were nominated for election at the next monthly meeting.

The following paper was then read:—

NOTES OF A CASE OF SARCOMA OF THE FUNDUS UTERI.

By A. Honman, M.R.C.S. Eng., L.S.A. Lond.

The interesting features of this case, in its medico-legal aspect, and the rarity of its pathological condition, must be my excuse for bringing it before the Society. I never saw the case during life, but owing to the obscurity of the cause of death, the medical men who attended the patient during life—and that only for a period of twenty-four hours—very properly declined to certify to the cause of death, and by the order of the Coroner I made a post-mortem.

The history of the case during her illness, as given me, was one of severe vomiting, sudden collapse, great dyspnœa, and finally unexpectedly rapid dissolution. The previous history, so far as could be obtained, is as follow:—The lady, unmarried, aged 32, had until recently menstruated regularly, but within the last five or six months had repeated attacks of menorrhagia; had begun to lose flesh, and complained of pain in the back. During the week previous to her death she had been taking riding lessons, which entailed a course of gymnastics, resulting in the production of profuse hæmorrhage and great pain.

On post-mortem examination sixty hours after death I found the body fairly well nourished. The breasts were filled with milk, so much so that even slight pressure caused it to flow in an abundant quantity. There was valvular heart mischief, the aortic valve being incompetent, with commencing tubercular condition of the right lung, and some old pleural adhesion. All the viscera indicated a previous condition of anæmia; the liver was pale and bloodless. In fact this condition was noticeable throughout the examination.

Upon examination of the pelvic organs the uterus was found to be enlarged, with a patch of inflammatory exudation on its posterior surface; the os was patulous, and easily admitted the index finger. Upon opening the uterus, I found at its fundus over the opening of the left Fallopian tube, a large mass, with apparently a pedicle, but closely resembling the remains of an ovum, was seen. Near the internal os, running nearly half the circumference of the uterus, was a transverse rent in its wall extending into the muscular tissue. Owing to the doubtful character of this growth, I deemed it advisable to keep the whole pelvic organs in their entirety, and these were submitted to Professor Allen by direction of the Coroner. Professor Allen's report, which follows, shows how necessary a microscopical examination was, before giving an opinion as to the character of the uterine tumour.

The vagina was not dilated, its internal circumference being under 3½ inches, its inner surface presented strongly marked ridges, its wall was greatly thickened near the outlet. The uterus was enlarged, especially transversely, it measured 3¼ inches from the fundus to the os. The os barely admitted the passage of the index finger at the time of the examination; above the os the cavity of the uterus rapidly enlarged, its transverse diameter being 2¾ inches. The thickness of the uterine wall at the fundus was $\frac{7}{16}$ of an inch, in the neck it was variable, the maximum diameter being ⅜ of an inch. The uterus was found to be peculiarly developed in its attachments, there being an absence of Douglas' pouch; the whole length of the cervix and upper part of the vagina being connected directly with the rectum, causing this portion to be unduly fixed in one position; the cervix was not enlarged equally, the vaginal portion being 1⅛ inch in length posteriorly and to the right, whilst anteriorly and to the left its length was only half an inch. The body of the uterus was bent forward so as to form an angle of 113 degrees to its neck. Inside the uterus, opposite this bend, there was a rupture in its wall, extending transversely from about the middle of the posterior surface round the left side of the cavity as far as the anterior surface. The rupture measured nearly two inches in length, and involved the mucous membrane of the uterus and about half the thickness of its muscular wall. The shortest distance between the rupture and the orifice of the os was $\frac{5}{8}$ of an inch. There was no sign of injury of the uterus or vagina beside the rupture. Within the uterus, at the fundus, was a mass of firm reddish substance, firmly attached to the wall of the uterus over the orifice of the left Fallopian tube; the free surface of this growth was irregular, and its substance was full of extravasated blood. The upper part of the growth, attached over the orifice of the left Fallopian tube, was sharply defined for the most part, being connected with the wall by a very short pedicle, under half an inch in thickness. From the pedicle the growth spread out in a well-defined portion, so as to measure an inch and a half by an inch superficially, and over half an inch in thickness. The wall of the uterus was distinctly moulded over the growth, which thus lay in a hollow depression. From this well-defined portion another portion extended down the anterior surface of the cavity of the uterus, having a broad ill-defined attachment; the posterior surface of the cavity of the uterus was slightly moulded over this portion. Upon the mass being divided, its cut surface showed a red, firm, homogeneous structure, evidently containing throughout a large quantity of extravasated blood. Upon division of the pedicle the sinuses in the wall opposite its insertion were found to be open and much dilated, and processes of the uterine wall could be seen running into it.

The ovaries were small and firm, neither of them contained any true corpora lutea; the left had evidently been bound by old adhesion to the broad ligament; the right ovary contained several small pigmented spots, evidently the remains of false corpora lutea.

The left Fallopian tube was narrow at its uterine end, but much dilated at its peritoneal extremity. The fimbriæ were swollen, its peritoneal orifice was rather widely patent; near this orifice the tube was dilated into a cavity full of thick pulpy matter, measuring $1\frac{1}{12}$ inch in diameter. Its wall was thin, lined with a thin membrane, easily pulled away, and showing no signs of tubercular growth; there were no signs of any inflammation of the peritoneum covering it. The inner part of the tube was narrow and empty, and the tube became lost under the growth already described. The right Fallopian tube at its peritoneal end was dilated, but empty, but not far from its middle its cavity was suddenly contracted. A fine eye probe introduced from its uterine orifice could not be made to enter the dilated portion of the tube.

On the posterior surface of the uterus there was a large patch of inflammatory exudation, commencing at the reflexion of the peritoneum, corresponding to Douglas' pouch in its normal state, and extending upwards. Part of this exudation was very recent, and could be easily scraped away, part of it was older and more adherent. On making a section through the walls of the uterus at this part, it was found that the rupture of the uterine wall was opposite this patch, and that the uterine structures between the rupture and the inflammatory exudation were discoloured. There was also extensive inflammatory exudation over the surface of the rectum and the sigmoid flexure. The peritoneum beneath this exudation was found thickened and infiltrated, as if from some long standing and oft repeated strain, the coats of the lower bowels were also much thickened; the most noticeable thickening being in the muscular coat. The uterine veins were for the most part much dilated, some of them were empty, others contained post-mortem clots, a few contained pale ante-mortem clots, and one contained a firm organised adherent clot. Under the microscope, the growth was found to be a mixed cell sarcoma, with a large quantity of extravasated blood in its tissue.

Discussion followed, in which Dr. Neild, Dr. Couper Johnston, Dr. Moloney, Professor Allen, and Dr. J. P. Ryan took part.

ADELAIDE MEDICAL CONGRESS.

On the motion of Dr. Brett, seconded by Dr. Jamieson, it was resolved that the Medical Society of Victoria tender its thanks to the Executive Committee of the Adelaide Medical Congress, for the unbounded and princely hospitality extended to the Victorian representatives of the profession during the Congress, and congratulate the Committee on the success that was attained.

CODE OF MEDICAL ETHICS.

Dr. **COUPER JOHNSTON**, having learnt in answer to question that there was no written code of Medical Ethics in the Colony, gave notice that at the next meeting of the Society, he would move "That the Society adopt a written code of medical ethics."

Dr. **JAMIESON** gave notice that, contingent upon the adoption of Dr. Couper Johnston's motion, he would move "That a Special Ethical Committee be appointed, to which all ethical questions shall be referred, with power to deal summarily with them at its discretion, or to refer them to a general meeting of the Society."

PATHOLOGICAL EXHIBITS.

Professor **ALLEN** then exhibited the following pathological specimens:—

(*a*) *An Adenoid Tumour* about the size of a small almond, lying beneath the peritoneal coat of the first portion of the duodenum. The tumour was composed of small lobules closely packed together, like those of a salivary gland. It occurred in a woman aged 33, and occasioned no symptoms.

(*b*) *Atrophic Granular Kidneys*, the left kidney being wasted into a mere vestige, while the right kidney was not much smaller than normal. The coats of the right renal artery were fairly healthy; while those of the left artery and its branches were greatly thickened, the lumen of the vessel being contracted to a fraction of its original size. The thickening affected all the coats, but especially the internal.

(*c*) *Rupture of the Aorta.*—This specimen was obtained from a man who was found in a dying state on one of the wharves. An atheromatous patch, a short distance from the aortic valves, had given way. Blood penetrated between the coats of the vessel, and rapidly dissected them from one another; the tear in the inner coat became greatly increased in size; the blood between the coats forced its way through the inner coat, at a point not far from the original lesion; and ultimately, when the coats had been dissected asunder almost all round the calibre of the aorta, a small perforation was produced through the outer coat into the pericardial sac, and fatal hæmorrhage ensued.

(*d*) A small sacculated aneurism just above the aortic valves, which burst by a pin-hole aperture into the cavity of the pericardium.

(*e*) A specimen showing dilatation of the first and second portions of the aortic arch, with great thickening of the coats, and intense atheroma and calcification. The left ventricle was very small; the mitral valve thickened, and one of its papillary muscles shrunken and fibroid. The coronary vessels were fairly healthy.

(*f*) *Ulceration of Intestines.*—There were irregular confluent ulcers throughout the descending colon, sigmoid flexure and rectum, the coats of the rectum being greatly thickened, and especially the muscular coat. In the small intestine ulcers were present from the commencement of the jejunum to the ileo-cæcal valve. In the ileum the ulcers were situated in Peyer's patches; they were transverse, in many instances almost encircling the bowel; they were chronic, indolent, sharp-edged, smooth-based; very few presented a trace of granularity in the peritoneum opposite them. In the floor of one ulcer there was a polypoid excrescence the size of a large pea. There was no enlargement of the mesenteric glands. No tubercle in the lungs nor in any other organ. The patient, a man aged 32, gave a history of dysentery.

SPECIAL MEETING.

A SPECIAL MEETING was held at the close of the ORDINARY MEETING.

INTERCOLONIAL MEDICAL CONGRESS.

Professor ALLEN stated that at the first session of the Intercolonial Medical Congress of Australasia recently held in Adelaide, it was resolved that the next session be held in Melbourne in 1890, or at such earlier date as the Medical Societies of Victoria might determine, Mr. T. N. Fitzgerald being unanimously appointed President-elect for the next session. Professor Allen explained that he had undertaken to lay the matter before the Medical Societies of Victoria, and that he proposed to transmit to the Presidents of the various Societies a circular letter containing the following suggestion:—"That the Medical Societies of Victoria empower a Provisional Committee to fix the date of the next session of the Intercolonial Medical Congress of Australasia, and to make all needful arrangements for such session until a general meeting of enrolled members can be held, at which a progress report shall be submitted; such Provisional Committee to consist of the President-elect, six representatives chosen by the Medical Society of Victoria, six by the Victorian Branch of the British Medical Association, three by the Sandhurst Medical Society, and three by the Ballarat Medical Society; the Committee to have power to add to its numbers, and five members to form a quorum; provided that if any of the Societies shall omit to appoint representatives within two months of the date of this circular, the President-elect, with the representatives of the other Societies appointed as above, shall exercise the powers hereinbefore mentioned."

On the motion of Dr. Brett, seconded by Dr. Syme, the meeting approved of the suggestions made by Professor Allen.

AMENDMENT OF THE LUNACY STATUTE.

Dr. **Graham** proposed that a memorial be addressed to the Honourable the Chief Secretary, urging the necessity for the early introduction into Parliament of a measure based generally on the recommendations of the Royal Commission in Lunacy; at the same time informing the Hon. the Chief Secretary that the Society entertains objections to certain of the said recommendations, and that, if the Hon. the Chief Secretary so desires, the Society will advise him thereon.

Dr. **Fishbourne** seconded the motion. Discussion followed, in which Professor Allen, Dr. Jamieson, and Dr. Moloney took part. The motion was then put and carried.

VACCINATION.

Dr. **Neild** drew attention to the recent decision of the Supreme Court, in the case Regina *v.* Allkins, and after discussion it was resolved that the matter should be dealt with under special notice, at the next monthly meeting.

ORDINARY MONTHLY MEETING.

WEDNESDAY, OCTOBER 5TH, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. F. J. Owen, C. S. Ryan, Courtenay, E. H. B. Nickoll, J. S. Nickoll, G. A. Syme, Joyce, Allen, J. Williams, Tweeddale, Neild, A. G. Black, Howard and Daish.

The President, Dr. **Williams**, occupied the chair.

The minutes of the preceding ordinary and special meetings were read and confirmed.

NEW MEMBERS.

The following gentlemen were elected members of the Society:—Dr. James Anderson, L. et L.M.R.C.P. et S. Ed., L.F.P.S.G., of Footscray, proposed by Dr. Snowball and seconded by Dr. C. S. Ryan; and Dr. James Innes Fullarton, L. et L.M.R.C.P. et S. Ed., of South Melbourne, proposed by Dr. Jamieson and seconded by Dr. Honman. Two gentlemen were nominated for election at the next monthly meeting.

AMENDMENT OF THE LUNACY STATUTE.

The **Hon. Secretary** reported that the Committee was in correspondence with the Hon. the Chief Secretary, concerning the amendment of the lunacy statute.

Pathological Exhibits.

Dr. G. A. **Syme** exhibited a specimen of hydatid of the pelvis, concerning which he has furnished the following notes :—

The features of interest were the great number of the cysts and the variety of their position, growing from the liver, omentum, mesentery and the parietal peritoneum of the abdomen and pelvis. Those from the peritoneum projected like buds, the size of walnuts, and possessed a very thin and delicate, but exceedingly vascular *tunica adventitia.* The cysts were in all stages of growth and degeneration, some having thin gelatinous walls, and containing clear hydatid fluid and echinococci, others having tough fibroid walls, with cheesy contents, or filled with compact masses of collapsed daughter-cysts, tightly packed together. In the pelvis a large thin-walled cyst lying to the left of the vagina compressed and almost completely obstructed the left ureter, which was dilated above the obstruction, and the left kidney was hydro-nephrotic. Laparatomy had been performed, the largest cyst evacuated, and its edges stitched to the edges of the abdominal incision. The specimen showed that the two peritoneal opposed surfaces were firmly glued together by abundant lymph.

Professor **Allen** exhibited the following pathological specimens :—

(*a*) *Galloping Phthisis and Pyæmia.*—The right lung of a man, aged 46, was shown thickly studded with broncho-pneumonic patches, some large and passing into rapid caseation and suppuration ; others small and miliary, for the most part closely grouped and fusing together. A large branch of the pulmonary vein was plugged with a softening thrombus. In the left lung large hard tubercles were scattered under the pleura and in the substance of the lung. Abscesses were found in the subcutaneous tissue, and beneath the pericardium and in the kidneys. In the kidney some of the abscesses had a rather tuberculous appearance ; and some distinct tubercles were found beneath the capsule of the liver.

(*b*) *Atheroma and Calcification of Arteries—Fibroid Degeneration of the Left Ventricle—Dry Gangrene of the Toes.*—These specimens were obtained from a man, aged 71, who died on October 3, 1887. The kidneys were subgranular. The left ventricle was dilated, and its walls thickened. There were numerous patches of atheroma in the coronary arteries, and in the wall of the left ventricle, especially towards the apex, and abutting on the endocardium there were extensive areas of fibroid degeneration and atrophy.

There was advanced atheroma and calcification of the descending aorta, and of the internal iliac and femoral arteries. The toes were in a state of dry gangrene, and numerous indolent sloughs were scattered over the thighs. The patient finally died of hæmorrhagic pneumonia.

(*c*) *Tubercular Lung and Pleura—Intussusception of Jejunum.*—The right lung of a negro, aged 44, was shown in an advanced stage of phthisis, with apical cavity and progressive diffuse caseation. Its surface was covered with dense false membranes of great thickness, in various stages of organisation, and tubercles were visible in the substance of the older false membranes. There was a recent intussusception over two inches in length, in the upper part of the jejunum.

(*d*) Rapid tubercular ulceration of the ileum, during the late stage of pulmonary phthisis.

Special Business.

Code of Ethics.—The consideration of Dr. Couper Johnston's motion, "that the Society adopt a written code of medical ethics," was postponed, as the mover was unable to be present.

Vaccination.—A discussion took place, in which most of the members present joined, concerning the recent decision of the Supreme Court in the case, Regina *v.* Allkins, in respect of vaccination by persons other than legally qualified medical practitioners. Finally, it was resolved to postpone any decision till the next meeting, and to request the Committee to prepare a report on the subject for consideration by the Society.

British Medical Association.

VICTORIAN BRANCH.

Ordinary Monthly Meeting.

Wednesday, 28th September, 1887.

(Hall of the Royal Society.)

Present: Drs. Willmott, Neild, Cutts, Rowan, Carstairs, Shields, Henry, Joyce, Joske, Simmons, Black.

The President, Dr. Willmott, in the chair.

New Members.

The election of the following new members was announced:—Dr. R. H. Fetherston, of the Women's Hospital; Dr. Anderson, of Footscray; Dr. McMullen, of Hawthorn.

The following paper was read :—

ON THE DIRECT COMMUNICABILITY OF TYPHOID FEVER.

By J. G. Carstairs, M.D., Geelong.

The unsatisfactory condition of our knowledge of the etiology of typhoid fever is my apology for bringing before you the question of its propagation by direct contagion from person to person, through the emanations from the lungs and skin; a question which, in the text books on the Practice of Medicine, is either denied or has not been accepted, yet which appears to me to involve a source of contagion to which the spread of the disease is largely due. However, I am not going to dogmatise, only to state what seems to me to be the truth, with a view to elicit opinion and stimulate enquiry. In large cities like this, where the disease has become endemic, and even in smaller towns during the prevalence of an epidemic, it is quite impossible to trace the source of contagion in many, perhaps in a majority of the cases; hence the perpetuation of the diversity of opinion that exists on causation and propagation. It is from imported cases in thinly peopled districts, or at the beginning of an outbreak in towns, that the most favourable opportunities for investigating the contagious nature of the disease present themselves, and, so far as the medical man himself is concerned, when he has officially to enquire into the origin and spread of the disease in the district under his charge. It has been under such circumstances, as Officer of Health for the Shire of Bellarine for many years, and more lately for the Borough of Newtown and Chilwell, that my convictions, gathered from private practice, have been confirmed, of the spread of typhoid from person to person, quite irrespective of contagion from exposure to the evacuations of a fever patient. The result of my investigations has impressed me with certain characteristics of the fever poison; but before alluding to these, let me give you a short history of some half a dozen cases, in illustration of my argument :—

Case I.—T. R., æt. 19, a labourer, living at Ballarat, came to see his brother in Chilwell, who was in the fourth week of typhoid, on the evening of the 19th March last; he sat close by him for some hours on the 20th, but had nothing to do with nursing him or attending to his wants; at 5 a.m. on the 21st March he left for Ballarat, and returned ill on 6th April, the seventeenth day.

The house was a model of cleanliness, and so was the yard; strict attention was paid to the disinfection and burying of the evacuations, under directions from Dr. Pincott, the medical attendant.

Case II.—E. M. æt. 4. A girl, æt. 12, was brought home from Cowie's Creek, five miles away, on 27th March, towards the end of the first week of fever, and removed to the Geelong Hospital soon after 8 a.m. of the 28th. She slept alone, but in the same room with her mother and five other children, aged from 2 to 19 years. She had two motions in the night, which were removed early in the morning and buried. Before being taken to the hospital, on the morning of the 28th, her sister, E. M., æt. 4, was put into her bed for two hours, and on the 7th April, the tenth day after, followed her to the hospital, the others escaped. There were no other cases of fever in that part of Newtown either before or since.

Case III.—H. M., æt. 15, barber's assistant, began to ail about 20th of April, and died of typhoid fever on the 27th day—the 17th of May. Having no suspicion of fever he attributed his illness to inhalation of the foul breath of a man he was shaving. He hung about for a week before finally taking to bed, and during this week a sister æt. 4, slept with him one night, and ten days after took ill of fever. There were six other children in the family, all but one older than this child, they were in the room with their brother by day during the first week of his illness, before the nature of his disease was known, but escaped. Dr. Maberley Smith, who attended these cases, informs me that "the hygienic conditions of the house were good, there was nothing wrong with the drainage, &c."

Cases IV. and V.—D. D., æt. 17, and Wm. D., æt. 13. Mrs. H., residing at Dandenong, went with a child aged 4 years, on 3rd of April last, to visit her parents in the Point Henry district of Bellarine shire, and a few days after both mother and child developed fever. Under directions from Dr. Small, their medical attendant, disinfection of the evacuations was strictly attended to, subsequently they were buried deep; the cast-off linen was also disinfected before being washed. The house was large, roomy, and well ventilated. The inmates, Mr. and Mrs. D., and seven of a family aged from 7 to 28 years. Two of the daughters were sent from home a few days after the fever was discovered. The eldest daughter, aged 28, assisted her mother in nursing the patients, but did not contract the disease. Two brothers, however, aged 17 and 13, who, when their sister, Mrs. H., was in a critical condition, visited her room and kissed her, were both seized with fever within three weeks; the other members of the family who did not visit the room escaped. The house was separated by a large field from the neighbouring farm houses. There was no fever in the district before or after.

Case VI. and VII.—F. D., æt. 19, domestic servant, went home from service on 20th of April, on the third day of her illness, and to hospital on the morning of 21st. She had no diarrhœa. The family consisted of Mr. and Mrs. D. and five other children, the youngest, A. K., aged 13, being an adopted child. The patient, F. D., slept the night of 20th alone, but in the same room with her sister A. D., and the girl A. K., who occupied a bed in the further part of the room. A. D. frequently visited her sister in the hospital, remaining from half an hour to an hour with her, and on the 24th of May was, with her bed-fellow A. K., taken to hospital with fever, having been ailing for some days. A. K. died in three weeks. No other member of the family took the fever. It is to be noted that A. K., who never visited the hospital, took ill about the same time as A. D. who did, and it would appear as if the latter had either carried the contagion in her clothing, or that even in the incubative stage contagion is possible where contact is so close as in this instance where they were bed-fellows.

Case VIII.—The last case I will trouble you with was handed me a few days ago by Dr. Newman, resident surgeon at the Geelong Hospital. Mrs. B., ill a week, was admitted to hospital on 27th June last. Had diarrhœa. Discharged August 20th. On 14th August, while sitting at the fire in the ward, she was visited by her son, E. B., æt. 6, whom she naturally fondled and kissed. After her return home he slept in a separate bed in the same room with his mother, and on 1st September was admitted to hospital ailing two days.

Now, Mr. President and Gentlemen, you will observe that in all these cases there was *close contact*, and no exposure to contagion other than that from the lungs and skin, except in Case II., where for some hours all were exposed to the emanations from two stools, yet the *least susceptible*, the only one who had come into close contact for a couple of hours with the patient, was the only one infected, and as she alone was exposed to the emanations from the lungs and skin, I think you will admit that her case was one of direct contagion.

This brings me to the point previously alluded to, the characteristics of the poison, which may be stated in propositions, and my first proposition is that typhoid fever is communicable by direct contagion, just as other contagious diseases are; second, the infecting distance is short, a few feet of air being sufficient so to dilate the virus as to render it inert; third, that therefore the infecting distance from the poison contained in the intestinal discharges must be equally short. I put them suggestively. Would they account for some of the differences of opinion that exist on the contagious nature of typhoid? Would they explain the occurrence of abortive cases, or cases of long incubation, on the ground that the patients had just come on the borders of the circle of contagion, and thus received a diluted poison? a sort of natural experiment on typhoid germ cultivation in fact.

Dr. **Shields** had listened to the paper with much interest, but he was not convinced of the directly contagious nature of typhoid. In the London Fever Hospital, not a single case could be adduced in proof of the direct contagion of typhoid. The alleged contagion in Dr. Carstair's cases, was apparent, and not real. Other sources of infection had not been excluded.

Dr. **Cutts** thought the paper was of value in prompting thought, as to whether there was not some explanation other than that of fæcal infection, by means of fæces? The opinion of direct contagion was certainly supported by the analogy of other specific fevers.

Dr. **Rowan** thought the few cases, adduced by Dr. Carstairs, could hardly be compared with the results supplied by a large hospital. In every case we were bound to consider the surroundings, and in most private homes the rules of sanitation were frequently disregarded.

Dr. **Joyce** believed that there was certainly infection in typhoid, within a limited area, apart from fæcal infection.

After some conversation,

Dr. **Carstairs** remarked in reply, that he had not attempted to deal with the matter exhaustively. He admitted that hospital experience was against the view of direct contagion, but suggested that the short infecting distance and free ventilation in the wards, might account for this. He referred to the *British Medical*

Journal, of April 25th, 1885, in which Dr. Collie, of the Homerton Fever Hospital, related a number of cases of direct contagion among the nurses and attendants, amongst others, two sisters who had been laundresses in the hospital for two years, washing the linen from typhoid patients, but took the disease soon after coming in contact with fever patients as nurses. Budd had affirmed his belief that typhoid was communicable by all the emanations, and Trousseau was of a like opinion. He trusted that members would think over the matter, and collect evidence bearing upon it.

The next paper read was upon

A CASE OF TYPHOID FEVER, COMPLICATED WITH TUBERCULAR MENINGITIS.

By A. S. Joske, M.B. Melb.

The history of the case I am about to read you is interesting from two points—(1) From the fact that the meningeal symptoms masked the typhoid ones. (2) Was the typhoid ulceration the cause of the meningitis being set up?

M. D., aged 8, was admitted into the Alfred Hospital under the care of Dr. Jamieson, on August 16, 1887. She had been attended by a medical man outside the hospital for two days. She was stated to have been ill seven days; to have been vomiting occasionally; very restless at night; to have been unable to take any food; to have been constipated and very thirsty.

The medical man in attendance stated that she had had a crop of spots on the day previous to admission, and that her temperature had been, on the night previous, 102°. The family history was good, her sister had, however, been in the hospital three months previous to her with a well-marked attack of typhoid fever, and her family had been living in the same house ever since.

On admission she was very flushed; temperature 99·4°. Has some sordes on teeth, and herpetic rash on lips and nose. Is very feverish and fretful; will not or cannot give any account of herself. Pupils small, but act to light; no strabismus; has persistent cry. Bowels are said not to have been open for two days. Lungs resonant, heart sounds weak; has well-marked tache cerebrale. Has a fatty tumour over the left hypochondrium, and has a bowl-shaped abdomen. Was given 2½ gr. of calomel.

On the 19th was very restless and feverish; slept badly, trying to get out of bed; keeps crying out persistently. Tache well marked, especially over the tumour. Teeth covered with sordes; clenches her hands. Complains of pain, and is now irritable when touched. Bowels open; motion dark-coloured; passes urine and fæces in bed. Temperature 97° only. Was given hydrarg. sub. gr. $\frac{1}{4}$, pulv. ipecac. co. gr. ii.

On the 20th, in much the same condition. Temperature subnormal.

21st—Has still the same persistent cry. Bowels open again; motion dark; has thumb clenched in closed palm; picks nose persistently. Complains and cries out if touched or moved. Had blisters applied to neck, and was given pot. bromid. gr. v., pot. iod. gr. iij. 4 tis. horis.

22nd—In still much the same condition; temperature subnormal; tache most marked; tongue much furred; had gr. ii. pot. iod. added to mixture.

23rd—Bowels not open for two days; to have hydrarg. subchl. gr. ii$\frac{1}{2}$. Pupils small, but act to light; no strabismus; general symptoms the same.

24th—Pupils have become dilated largely, but act to light. Lies on right side; legs drawn up to body. Tongue is becoming dry and brown; will not take her nourishment. She died on the morning of the 26th, at 8 a.m., and vomited a great deal of mucus just before death. She had kept up her persistent cry all the time, continuously from the day of admission.

A post-mortem examination was made twelve hours after death. Rigor mortis was well marked. The lungs were somewhat congested; the other organs also are congested. The brain was soft and diffluent; the lateral ventricles were both so full of fluid that they burst on removing the brain. There were small patches of tubercle along both sylvian fissures. The pia mater and dura mater were adherent; sinuses and vessels of dura mater were much congested. The Peyer's patches of the small intestine, for about eight or nine inches above the ileo-cæcal valve, were much congested, and were now beginning to become ulcerated and excoriated. The corresponding mesenteric glands were much enlarged.

Dr. Henry drew attention to the neglect, on the part of land syndicates, to make proper provision for drainage of the new streets they were continually forming. The local municipal councils had no power to compel compliance with these requirements, and the result was a large extension of unhealthy dwelling places. Rows of houses were built with their back premises facing each other, and discharging their drainage into a common right-of-way, having no proper gutter or culvert. In Melbourne and Geelong, the Building Act made such provision compulsory, but everywhere else it was optional. The Municipal Association had advised the inclusion of a clause, dealing with the matter in the Amending Health Act, but as the members of the syndicates were all in Parliament, the clause was struck out. The owners of the houses were themselves virtually prevented completing the requirements, by reason of the dishonest retention of a strip of ground between the backyard and the right-of-way.

Dr. **Neild** could confirm all that Dr. Henry had said. He also made mention of the dangerous practice of erecting buildings upon ground made by the deposit of town refuse.

Dr. **Cutts** remarked upon the smallness of the allotments into which the syndicates subdivided their land.

Dr. **Rowan** mentioned some cases of septic fever he had had to treat in the Women's Hospital, which had come from South Melbourne, where large areas of building ground have been made out of the filthy mud dredged from the Yarra. Women who lived in cottages built upon this mud, were frequently found to suffer from pelvic cellulitis.

After some further conversation it was resolved that a deputation, consisting of the President, Dr. Henry, Dr. Neild, Dr. Cutts and Dr. Rowan, wait upon the President of the Central Board of Health, to point out to him the dangerous practice of selling land for building purposes, the land not having been previously properly surveyed, and efficient provision made for drainage. Also, that the practice of building upon ground, composed of town refuse, be in like manner dwelt upon, with a view to its suppression by Legislative enactment.

Victorian Medical Benevolent Association.

The Twenty-second Annual Meeting of the above Association was held in the Hall of the Medical Society, on Friday evening, September 16th, Mr. Rudall, Vice-President, in the chair.

The first business was the reading by the Hon. Secretary of the

Report of the Committee.

Your Committee have to report that the support given to the Association has continued to be satisfactory; for although thirteen names have been erased from the list of the previous year's subscribers, twenty-six new names have been added. They are gratified to think, therefore, that the usefulness of the Association has not ceased to be acknowledged by the profession.

It will be observed that some of the applications during the year, have been from widows of medical men. It is true that none of these have been of a special kind, but the fact that such cases are obviously on the increase, shows that the permanent fund, applicable solely for the relief of widows, will sooner or later, have to be drawn on for that purpose.

The fact that the permanent fund now amounts to more than £2000, supplies an occasion for especial congratulation, since the Association will now be better prepared with means of relief, if special cases should arise.

The attendance of the Committee, which has met four times, has been as follows:—Dr. Jonasson 4, Dr. Jamieson 4, Dr. Neild 4, Dr. Graham 3, Dr. Williams 2, Dr. Haig 2, Dr. Cutts 1, Mr. Rudall 1, Dr. Ryan 1, Dr. M'Millan 0, Mr. Fitzgerald 0.

List of Cases.

1. The widow of an M.R.C.S. Eng. who had been previously assisted, was granted a further sum of £10. In this case the Committee have good reason to believe that the money granted was most judiciously expended.
2. The widow of an M.R.C.S. Eng., and L.S.A. Lond., who had long practised in one of the suburbs, was granted £25, her case being especially urged by two subscribers to the fund.
3. An L.R.C.S.I. and L.K.Q.C.P.I., who, by reason of sickness, had been obliged to leave the country district where he had practised, was granted £10 to enable him to re-commence in another locality.
4. An M.R.C.S. Eng., whose illness had compelled him to give up his practice in a country district, and who was highly spoken of by a subscriber, was granted £5 in aid of a fund to enable him to commence practice again.

In addition to the above, several smaller sums have been granted for casual relief.

Several applications have been declined for want of sufficient information as to the circumstances of the case.

This, after a brief conversation, was adopted.

The Treasurer, Dr. Jamieson, then submitted the cash statement as follows:—

THE HON. TREASURER IN ACCOUNT WITH THE VICTORIAN MEDICAL BENEVOLENT ASSOCIATION.

Dr.

To Balance from 1885-86	£75	2	5
Interest on Stock and Debentures	28	0	0
Interest on Fixed Deposits	54	0	0
Interest Savings Bank	2	18	4
Subscriptions	101	17	0
	£261	17	9

Cr.

By Fixed Deposit Australian Deposit & Mortgage Bank	£75	0	0
Grants	52	17	0
Collector's Commission	9	15	0
Printing, &c.	5	17	6
Exchange and Commission for Collecting Interest	0	11	0
Balance in Treasurer's hands	117	17	3
	£261	17	9

CAPITAL ACCOUNT.

Inscribed Stock	£500	0	0
Queensland Debentures	200	0	0
Medical Society Debentures	60	0	0
Fixed Deposit Australian Deposit & Mortgage Bank	700	0	0
Do. Commercial Bank	400	0	0
Deposit Savings Bank	61	8	4
Balance in Treasurer's hands	117	17	3
	£2039	5	7

Audited and found correct, and Securities examined,

September 13, 1887. P. B. Bennie.

This also, after a brief discussion, was adopted.

The election of officers was then proceeded with, the result being as follows:—President, Dr. Cutts; Vice-Presidents, Dr. Jonasson and Mr. Rudall; Honorary Treasurer, Dr. Jamieson; Joint Honorary Secretaries, Dr. Neild and Dr. Graham; Committee, Dr. Williams, Dr. Jackson, Dr. Charles Ryan and Dr. Haig; Auditors, Dr. Le Fevre and Dr. Bennie; Trustees, Dr. Cutts, Dr. Neild and Mr. Fitzgerald.

The Subjoined List of Subscribers of One Guinea was Submitted :—

Adam, G. R.
Alsop, T. O. F.
Armstrong, G. A.
Barker, W.
Beaney, J. G.
Bennie, P. B.
Bird, F. D.
Bird, S. D.
Black, A. G.
Bowen, A.
Brett, J.
Burke, S. J.
Burton, W. H.
Büttner, A.
Carstairs, J. G.
Cheetham, F.
Cooke, J.
Courtenay, J. H.
Crossen, H.
Cutts, W. H.
Dick, T. T.
Dowling, F. J.
Duigan, C. B.
Duret, C.
Elliott, N. P.
Fetherston, G. H.
Fetherston, R. H.
Fitzgerald, T. N.
Ford, F. T. W.
Fisher, A.
Fletcher, E.
Flett, W. S.
Francis, H.
Figg, E. G.
Fyffe, B.
Girdlestone, T. M. (2 years)
Graham, G.
Gray, A. S. (2 years)
Gray, C. E.
Günst, C. W.
Haig, W.
Harricks, F. M.
Heffernan, E. B.
Hewlett, T.
Honman, A.
Hooper, J. D.
Horne, G.
Iredell, C. L. M.
Jackson, James
Jakins, W. V.
Jamieson, J.
Jonasson, H.
Knaggs, R.
Langford, W.
Le Fevre, G.
Mailer, M.
MacInerney, J. R.
McMillan, T. L.
McCreery, J. V.
M'Crea, W.
McMullen, H.
Meyer, F.
Moloney, P.
Mountain, W. J.
Neild, J. E.
O'Hara, H. M.
Owen, F. F.
Owen, W. H.
Penfold, O.
Peipers, F.
Pincott, R. (2 years)
Ramsey, J. K.
Rankin, W. B.
Reid, J.
Robertson, J.
Rudall, J. T.
Ryan, C. S.
Schleicher, C.
Simmons, E. L.
Smith, W. B.
Smith, C.
Smith, L. L.
Snowball, W.
Springthorpe, J. W.
Stanton, T.
Thomson, M. B.
Talbot, T.
Travers, G. F.
Turner, D.
Walsh, W. B.
Webb, J. H. (2 years)
Whitcombe, W. P.
Williams, D. J.
Williams, J.

Australian Medical Journal.

OCTOBER 15th, 1887.

FEMALE MEDICAL EDUCATION.

After delay, which has been unnecessarily prolonged, the University Council has arrived at a decision on the question of the facilities to be given to women in pursuing their medical studies. That decision is of the nature of a compromise, and as such is not likely to be considered satisfactory by either side. For sides there certainly are in the matter, and opinions held that are utterly diverse. Much froth and fury have been shown by newspaper correspondents about the trades-unionism of members of the medical profession; and charges, ranging from lack of sympathy to jealousy, have been thrown out against the teachers in the Medical School, most of those who have rushed into print simply showing their total ignorance, both about what had been said and done, and of what is practicable. There is no doubt that the Council only realised the difficulty of the question after having had a conference with the Faculty of Medicine. On that occasion the question in all its aspects was freely discussed, and probably the general impression conveyed was that, whatever solution was adopted, considerable difficulties would be found to arise. One course, previously suggested as feasible, was then universally felt to be out of the range of practical legislation, viz., having separate instruction in parts of some courses, such as surgery, obstetrics, and medical jurisprudence. To split up a course of instruction, in any branch of science, into sections, labelled respectively "proper" and "improper," would have been not only ruinous and absurd, but would have thrown on the teacher the unfair responsibility of settling the topics coming under each heading. That plan being definitely thrown aside, there remained only the choice between completely separate or combined courses. The former of these had the advantage of suiting what is supposed to be the popular taste, and being in accordance with the expressed wish of the female students themselves. But in practice it would have been found difficult to carry out, since most of the courses are of such a nature that all, or nearly all of the lectures could be given to mixed classes without any suspicion of difficulty. That being so, it would have been an utter waste of power to ask a lecturer to re-deliver his whole course to a small class of female students. The course of obstetrics was the only one, in fact, which was asked for completely separate. But if all other subjects had been taken together, up to the fourth year, it would have been an unnecessary straining after propriety to begin with separate instruction then. Having decided, and on the whole properly decided, that systematic instruction in the class-rooms must be taken by male and female students together and all through, there remained the separate, or at least separable question of the facilities to be given as regards practical training in the dissecting-room and at the hospital. Here compromise seemed to be possible, with the further advantage that the difficulties in points of detail would not fall on the Council. There is nothing unreasonable in the proposal to provide a separate room, in which the female students may carry on dissections, leaving to the Professor of Anatomy the allotment of parts. But arrangements for separate hospital instruction cannot be regarded as complete, merely because the University Council has decided that it should be allowed. The decision amounts to this, that the Council sees no need for separate lectures at the University, but considers that the Committee of the Alfred Hospital should arrange to provide clinical training, including lectures, exclusively for women. Provisional arrangements have, as a matter of fact, been made for carrying on systematic clinical work at that Hospital, but whether the managers will go on to declare that the instruction shall be reserved for women, is another question. Possibly things may be allowed to drift to a settlement, because, if the women attend the Alfred Hospital, it is not likely that the male students will begin to seek admission. This, of course, is all on the supposition that there will be any female students next year, since they have all declared their intention of seeking elsewhere the facilities for separate instruction, which are to be denied them here.

NEW PHARMACEUTICAL PREPARATIONS.

At the Intercolonial Medical Congress, in Adelaide, a very interesting exhibition of recent improvements in pharmacy was made by Messrs. Burroughs and Wellcome. Very much has been done by this firm to make the work of prescribing easy, and some of their preparations are of excellent quality. Above all, they have been successful in putting remedies into portable shape, so that quite a stock of powerful agents are now obtainable in the form of compressed tablets, adapted either for internal administration, or in solution for use hypodermically. The firm has recently sent out a series of liquid preparations, under the name of Valoids. Very many well-known and some new remedies have thus been provided in concentrated form, and of uniform strength. A number of articles have also been put into palatable shape as Elixoids, one of the newest being the elixoid of pepsin, containing a grain of Fairchild's scale pepsin in each drachm, and well fitted for administration with no other addition than a little acid and water. Lanoline in a very pure state is now obtainable at a reasonable price, by those who wish to make trial of it in skin affections. The exhibit, in addition to drugs, contained a great variety of medicine cases, chloride of ammonium inhalers, &c., and we must make special reference to the hypodermic syringes, in cases convenient for the pocket, and so arranged that they can be fitted with a number of tubes for compressed tablets of morphia and many other powerful remedies. Specimens of the firm's specialties will, we are informed, be forwarded to medical men on application at the office in Melbourne.

University Intelligence.

MELBOURNE UNIVERSITY.

At the meeting of the Council on the 19th ult., it was resolved to hold a conference with the Faculty of Medicine, regarding lectures to female medical students.

This conference was held on the 26th ult. Professor Allen, Dean of the Faculty, after referring to the practice in the medical schools to which females students are admitted, expressed the opinion that there need be no serious difficulty in carrying out the teaching of male and female students together, so far as concerned systematic lectures. A separate room could be provided for dissections, and it might be possible for the female students to get their practice at the Alfred Hospital. It would be necessary, before coming to a final decision, to learn whether the managers of the hospital would offer any objection to the attendance of the female students. The general opinion among the members of the Faculty was that classes should be mixed, the only ones who feared that difficulties would arise being Dr. Jamieson and Mr. Girdlestone. The latter expressed grave doubts whether certain branches of surgery could or would be properly followed out by women. The discussion of the question was carried out in the freest manner, but there was evidently difficulty in arriving at any conclusion, and the Council separated without coming to a decision.

At the meeting of the Council on the 3rd inst., the following letter, signed by all the lady students of medicine, was received:—

"As much uncertainty appears to prevail among yourselves, and among the members of the Medical Faculty, with regard to our views on the question of mixed classes, and as this uncertainty has already given rise to many misconceptions, we venture to lay before you, at this juncture, a brief statement of our position.

"We have entered upon the study of medicine in this University, believing that there is an urgent need of educated women to attend women, and that very great suffering, and, in some cases, death even, occur through such attendance not being available.

"As women, we claim, therefore, the right to qualify ourselves to attend upon the sick and suffering of our own sex. We do not desire, however, to dwell upon this point, as you, gentlemen, practically conceded it by removing the restriction which, till this year, closed the doors of the Medical School to women.

"But more than the mere removal of the restriction is, we believe, required. While we are perfectly ready to admit that the greater part of our course must be done in common with men, we are convinced that to insist upon our attending dissections, hospital practice, and certain courses, or portions of courses with men, would have the effect of rendering the permission you have granted us to study practically worthless, and would be repugnant, not only to our own feelings, but to those of the majority of this community.

"We believe that it would be impossible to carry out our course under such conditions, and we are reluctantly compelled, therefore, to express our intention of discontinuing our work here if no such concessions can be granted to us. Those which we ask are, however, comparatively few. They comprise:—(*a*) Separate hospital practice; (*b*) separate dissections; (*c*) separate instruction in obstetrics and diseases of women; (*d*) some separate lectures in each of the following courses, viz., surgery, pathology, and medical jurisprudence.

"With regard to hospital instruction, we originally suggested, and we are glad to see that the suggestion has been taken up, that the Alfred Hospital should be used utilised for this purpose.

"It has been pointed out that we should be placed at a disadvantage by having to attend lectures at a hospital situated a considerable distance both from the University and the city; but we believe that the advantage of having separate lectures there would counterbalance the inconvenience and loss of time, and we are quite prepared to contend with more serious obstacles.

"In conclusion, gentlemen, we beg to thank you for the interest you have already shown in our work, and to express the hope that you will not render our past work useless, by witholding from us concessions without which, we are firmly convinced, our further study will be rendered completely impracticable."

It was decided to consider the whole question at the Special Meeting, and in particular, a motion by Dr. Morrison, that separate instruction should be provided in certain specified subjects.

At the meeting of the Council on the 10th inst., Dr. Morrison, in accordance with notice, moved:—"1. That the course of instruction, theoretical and practical, for male and female students of medicine be in all respects similar. 2. But, with a view to obviate objections, that separate courses be provided in practical anatomy (dissections), surgery, and obstetrics, and if possible, separate hospital practice." He added that when in full operation, the additional cost of giving this particular separate instruction, would not be more than £1000 a year, and even that sum would be reduced considerably by the additional fees received.

The Chancellor stated that in Paris, where instruction was common to male and female students, there were 108 women attending medical classes, and that the results had been good.

An amendment was moved by Sir Archibald Michie, to the effect that instruction should be given in common in every department of study. On this, a further amendment was moved by Dr. Cutts:—"That a separate dissecting room and separate hospital instruction be given to women students."

This amendment was agreed to by eight votes to four, Dr. Morrison withdrawing the second part of his motion in favour of it.

On the motion of Mr. Higgins, it was decided to communicate with the authorities of the Alfred Hospital, to ascertain whether arrangements could be made to give separate hospital practice and clinical lectures at that hospital to female students.

We learn, with regret, of the serious illness of Dr. Verco, President of the Intercolonial Medical Congress recently held in Adelaide. During the sittings of the Congress, he was suffering from the effects of overwork, and, when on a visit to Mount Gambier, he became affected with what proved to be inflammation of the brain. At first his life was despaired of, but, according to the latest intelligence, there were good hopes of complete recovery.

Hospital Intelligence.

MELBOURNE HOSPITAL.

At a meeting of the Committee on the 20th ult., a return was laid on the table, showing that the expenses at the recent election of the Medical Staff amounted to £125. It was agreed, that in future the orders supplied to subscribers should simply be a recommendation for admission, leaving it to the Hospital authorities to decide whether the case was suited for treatment as an out or in-patient.

ALFRED HOSPITAL.

At the meeting of the Committee on the 16th ult., it was resolved to increase the charge for paying patients to 30s. weekly, in addition to the fee of £1 for medical attendance.

At the meeting on the 30th ult., a letter was received from the Central Board of Health, declining the offer of £250 for the tents, buildings, &c., which had been used for a camp hospital in the grounds. The Quarterly Report from the Medical Staff stated that the sanitary condition of the Hospital had, on the whole, been satisfactory, but that it had been thought necessary to empty and clean Ward No. 4. It was resolved to join with the Medical Staff in presenting a testimonial to Mr. R. C. Norman, who had filled the position of acting superintendent during the absence on leave of Mr. J. F. Anderson.

At the meeting on the 7th inst., a report on the subject of clinical instruction for students was received. The recommendations of the Sub-committee, consisting of Drs. Embling and Rudall and Messrs. Ellery and Thomson, were adopted. It was also decided to apply for recognition of the medical and surgical practice of the Hospital by the General Medical Council and the chief licensing bodies in Great Britain.

Vital Statistics.

The report of the Government Statist on the Vital Statistics of Melbourne and suburbs, for August 1887, shows that the births of 1430 children, viz., 730 boys and 700 girls, were registered during the month. The deaths registered numbered 656, viz., 380 of males and 276 of females. To every 1000 of the population of the district the proportion of births registered was 3·85, and of deaths

1·77. One hundred and thirty deaths occurred in public institutions. The number of children under one year who died was 167, the total number under five years being 233.

In August, as compared with the previous month, under the head of specific febrile or zymotic diseases, deaths from measles increased from 2 to 14, and those from septic diseases from 4 to 9. On the other hand, deaths from whooping-cough decreased from 8 to 4, and those from typhoid fever from 15 to 9. Under the head of local diseases, deaths from brain and nerve disorders rose from 63 to 77, those from heart affections from 42 to 59, those from lung and chest complaints from 108 to 129, and those from bowel and stomach diseases from 44 to 53. Only 4 deaths of child-bearing women occurred during the month, the number being identical with that in July. It follows that 1 death of a mother took place to every 358 children born alive in the month under review, and 1 to every 298 such children in the previous month.

Local Subjects.

PUBLIC VACCINATORS.—The following appointments have been made:—Smythesdale—John Bennett Hayes, L.R.C.S., *vice* Robert Stewart, L.R.C.S., deceased; St. Kilda West—Arthur Frederick Davenport, M.R.C.S., *vice* W. B. Rankin, L.R.C.S., resigned.

VICTORIAN MILITIA.—The commission of William L. Mullen, M.B. Ch. B., as surgeon on the unattached list, has been confirmed.

The death is announced of Dr. Solomon Iffla, who practised for many years in South Melbourne, where he took a prominent part in public affairs. Though he had withdrawn from active work for some time, he was once well known in professional circles, and he ranks as one of the founders of the Victorian Philosophical Society, which afterwards merged into the Royal Society of Victoria. He was also, for some time, visitor of the lunatic asylums.

The Bill providing for the establishment of a Metropolitan Board of Works has been distributed among members of the Legislative Assembly. It is proposed that there shall be representatives from all the municipalities, in proportion to the rateable value of the property in each, but it is provided that the City of Melbourne shall, at all times, have one fifth of the whole number of members on the Board. The members are to be elected for three years, and they are to elect a chairman, who shall be paid. Immediately upon its establishment, the Board will take over the entire management of the water supply and of the sewerage and drainage of the metropolis. Surveys are to be made as soon as possible, and plans and maps prepared, showing the whole sewerage and drainage systems of the metropolis. All public streams within the metropolitan area are to be vested in the Board. The expenses of the Board in connection with the water supply, the main drainage of the metropolis, and otherwise, are to be defrayed from and out of any surplus revenue from the water supply, which may remain over after payment of any moneys as principal or interest, for payment of which the Board shall be liable in any year. Should this revenue be insufficient, the Board may strike a "metropolis main sewers rate," which is not to exceed 6d. in the pound on the net annual value of property, the valuation of the respective municipalities being adopted.

Quite a number of cases of small-pox have occurred in Launceston, Tasmania, several of them proving fatal. As the disease had been overlooked for two or three weeks, and it did not seem as if the health authorities had taken sufficiently active steps for stopping its progress, the Central Board of Health of Victoria decided, at a meeting on the 30th ult., to place in quarantine all vessels arriving from Tasmania. A similar course was adopted by the health authorities of New South Wales and South Australia. Suddenly, however, the Sydney Central Board decided to suspend the order, and under protest the Melbourne Board decided, at a meeting on the 6th inst., to relax quarantine restrictions so far as concerned vessels arriving from places in Tasmania other than Launceston. A special meeting was held on the 8th inst. to decide on the action to be taken in the matter of a passenger by the steamer *Mangana*, who had, with the formal permission of Dr. Figg, been allowed to evade quarantine. As no satisfactory explanation had been received, it was resolved that Dr. Figg should be called on to send in a written explanation of his conduct, and to abstain from performing the duties of Health Officer pending the decision of the Board. The escaped passenger had been arrested by the police, and removed to the sanatorium at Cut-Paw-Paw. At this meeting it was resolved again to place in quarantine all vessels arriving from Tasmania, and to urge on the Sydney Central Board the necessity of taking similar steps, in view of the fact that small-pox seemed to be still spreading in Launceston. According to the latest reports, thirty-two cases have occurred, eight of them proving fatal.

The Australian Health Society held its Annual Meeting on the 10th inst., under the presidency of His Honor the Chief Justice. The report of the Council detailed the work done during the year, which would have been greater if more support had been given by the public. Dr. Jamieson, City Health Officer, read a paper entitled: "A Sanitary Experiment and Its Results," giving a short account of the benefits which had followed the adoption of the deep drainage system in Adelaide, both in adding to the comfort of the citizens, and in improving the public health. He urged the necessity of adopting speedily a similar system in Melbourne, and entered into particulars of the probable cost, and the saving of life and health which might be expected to follow. A paper by Mr. Witt, describing a new system of ventilation, was also read, a model of the appliance being exhibited, for the purpose of showing its mode of working. The new course of popular lectures under the direction of the Society was begun on the 3rd inst., by Prof. Jackson of the College of Pharmacy, the title of the lecture being, "A Chat about Drugs."

BIRTHS.

Bennie.—On the 3rd inst., at 126 Collins-street East, the wife of Peter Bruce Bennie, M.D., of a son.

Henderson.—On the 17th ult., at Lilydale, the wife of Dr. A. V. Henderson, of a son.

Reid.—On the 19th ult., at Bleak-house, Catslemaine, the wife of G. More Reid, M.D., of a daughter.

Smeal.—On the 2nd inst., the wife of Dr. James Smeal, Ararat, of a son.

MARRIAGE.

Sutherland—M'Donald.—On the 12th ult., at Prahran, Dr. Alex. Sutherland, of Balaclava, to Sarah, daughter of the late George M'Donald, of Prahran.

DEATHS.

Iffla.—On the 14th ult., at Daylesford-house, Parliament-place, East Melbourne, Solomon Iffla, L.F.P.S.G., aged 66 years.

O'Hara.—On the 25th ult., at West Maitland, N.S.W., Henry Lewis O'Hara, M.R.C.S., late of St. Kilda, aged 72 years.

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Original Articles.

ON MOVABLE KIDNEY.

By David Grant, M.A., M.D. Edin.

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(*Continued from page* 346.)

Physical Signs.

These include facts recognisable by inspection, palpation and percussion, palpation being the most important.

Inspection has been said by many writers to show a flattening of the lumbar region, but there is probably some error here. When we reflect that the posterior surface of the kidney rests on a firm muscular mass, which is rendered still firmer by the presence of the lumbar transverse processes, it appears impossible that the mere absence of the kidney from its normal position should produce any alteration in the external prominence of the loin. As a matter of fact and observation, no flattening or sinking-in is visible, and how little importance it would possess, even if present, is shown by the difficulty with which, even in a thin person, the normally-situated kidney can be felt. Anteriorly, in a very thin person, the outline of the kidney may be distinguishable on the abdominal surface. Thus in Case IV., in the morning, when the abdomen is empty and undistended, and the kidney is at its lowest level, it may be seen to cause a slight prominence on the abdominal wall, which moves somewhat with deep respiration.

Much more useful are the results of *palpation* by means of which an oval smooth firm tumour can be detected, usually between the costal border and the umbilicus. The surface is smooth, and the tumour is evasive and difficult to grasp, slipping away quickly under the hand. Its most pathognomonic character is the ease with which it can be pushed upwards and outwards, under the ribs, until it comes approximately into the normal position of the kidney. On deep respiration, it can be felt to move upwards and downwards.

Authors describe the knee-elbow position, and the recumbent position as those in which the kidney is most easily palpated (Landau, &c.), but my own experience inclines me to believe, that the erect or semi-erect position is better. In Case IV., the kidney recedes under the ribs on lying down, and its lower border can be felt only on deep inspiration, while in the erect position it can be manipulated with great ease, and grasped between the thumb and fingers of the right hand. This case shows, that even a very freely movable kidney might escape detection if searched for only in the recumbent position.

Palpation of the two lumbar regions is said to show that there is less resistence on the affected side, but this also, like the alleged flattening visible on inspection, is a sign doubtful and of little value.

Percussion.—Under any conditions, except that of great increase in size, the kidney is an organ but little accessible to percussion. Indeed, when the thickness of the lumbar muscles, the contiguity on the right side of the large mass of the liver, and the extreme variability in the state of distension of the intestine, are considered, it would appear to be sufficiently evident, that alteration in the size of the position of the kidney can have little influence on the percussion-sound. On this point Skoda says:—"Die Grösse der Nieren trägt sehr wenig zur Beschaffenheit des Perkussionschalles in der Lumbalgegend bei. Derselbe kann ganz dumpf sein, wenn die Nieren sehr klein, und tympanitisch, obgleich die Nieren sehr gross sind." The same remark would seem applicable to the presence or absence of the kidney in its normal site. Nevertheless, many authors, including Trousseau and Rollet, lay stress on the point that on the side affected, the lumbar percussion-note is clearer and fuller than on the sound side, and Guttmann says categorically: "If one kidney is dislocated, then the resonance in the lumbar region of that side is clearer than upon the other side." The results of often repeated examinations in Case IV., at different periods of the day, and under different conditions, have convinced me that this test is of no value in diagnosis, and that the character of the lumbar percussion-sound is almost entirely determined by the degree of distension of the bowel, and by its freedom to pass backward into the lumbar region. The latter factor in the case has, I think, been overlooked by authors, and yet I believe that it may produce an actual reversal of the signs described, viz., a greater amount of resonance in the loin on the sound side. Thus in this case (the right kidney being movable), the note over the right loin is invariably less resonant than that on the left, and is almost always *actually dull* except in the supine position, when the kidney recedes, and the bowel is free to gravitate into the lumbar region. The following shows the usual state of the percussion-sounds in the various positions indicated:--

	Erect Position.	Prone.	Supine.
Right Loin ..	Dull	Dull	Slightly tympanitic
Left Loin ..	Tympanitic	Less tympanitic	Tympanitic

This dulness on the right side in the erect position, when the kidney is furthest away from the loin, is in direct contradiction to the rule usually given, but may, I think, be accounted for by two conditions:—(1) probably the liver descends to some extent when the kidney falls, and so causes an increase instead of a diminution of dulness; (2) the laxity of the cellular tissue which permits the descent of the kidney, also permits the recession from the lumbar region of the distended bowel, and the prolapsed kidney itself, lying behind the bowel at a lower level than the normal, actually constitutes an obstacle to the passage of the bowel into the loin. In the recumbent position, on the other hand, the kidney recedes within the ribs, and the bowel is thus free to gravitate back into the lumbar region, and yield there its characteristic tympanitic note. Whatever may be the explanation of the fact, the foregoing statement represents the fact exactly as it exists in this case, and although, since I observed it, I have not had an opportunity of confirming it in other cases, I am convinced, that at least in cases of right movable kidney, the affected loin will be found less, not more, resonant than the unaffected side.

Percussion over the kidney itself, as it lies in its abnormal position, yields a muffled tympanitic note, or when the bowel is undistended, light percussion may give absolute dulness, in consequence of the kidney coming almost directly in contact with the abdominal wall.

DIFFERENTIAL DIAGNOSIS.

Movable kidneys have been mistaken for a great variety of other conditions, including tumours or hydatids of the liver, tumours of the gall-bladder, omentum, spleen, uterus or ovaries, carcinoma of the colon, fæcal accumulation, &c. The acute exacerbations have even been diagnosed and treated as peritonitis (Trousseau). When a tumour is known to be present in the abdomen, the possibility of movable kidney ought always to be kept in mind, when the consideration of the following points will usually be a sufficient guide, viz., the oval or rounded shape, the smoothness of surface, the slippery character of the tumour, the fact that it can be most easily pushed into the loin, and the character of the pain produced on pressure.

More mistakes are probably made when the symptoms are entirely subjective, and no "tumour" is complained of. In such cases the diagnosis of primary gastric or intestinal lesion is very likely to be made without physical examination, or, if the symptoms complained are specially peculiar, and not explicable by the common stomach or bowel troubles, the patient is most probably condemned as hysterical or hypochondriacal, and dismissed with an admonition or a placebo. It should be an absolute rule, in all cases of obscure or unaccountable abdominal pain, to make a systematic search for a movable kidney. From this, the symptomatic point of view, movable kidney is most likely to be confounded with functional nervous dyspepsia, gastric or intestinal catarrh, lumbar rheumatism or neuralgia, or simple flatulent colic. The lumbar pain may also be attributed to uterine displacement, and I have no doubt that the whole of the symptoms are often attributed to hysteria or hypochondria, simply from their apparently incomprehensible character. The special features which ought to raise the suspicion of movable kidney in any case I believe to be the following:—(1) that the pains are peculiarly localised in one half of the abdomen, and are usually most intense in the immediate vicinity of the navel; (2) they are not removed, as merely gastro-intestinal pains are, by even the most careful regulation of diet; (3) they are usually relieved by the ingestion of food; (4) they are much intensified by exertion, relieved by rest in the recumbent posture, and disappear entirely if this rest be sufficiently prolonged; (5) the digestive disturbances are also influenced more by rest and exertion than by quality of diet.

PROGNOSIS.

Of my four cases one was 80, and another is now 69 years of age, this illustrates well the fact that movable kidney of itself does not threaten life. Ebstein says that "the movable kidney has, it seems, never been known to terminate fatally," and

Trousseau also holds that "in itself, displaced kidney does not present any gravity in the prognosis. The prognosis only becomes serious through blunders in diagnosis, and consequent improper treatment." Keppler, however, maintains that "the floating kidney, even apart from all and every complication, occasions nutritive disturbances, which slowly, but steadily develope themselves, and which, in time, infallibly undermine health and life," and by this belief he justifies his formidable dictum that, as soon as they begin to cause any symptoms, they should be removed by nephrectomy. This is obviously an extreme view to take, and even the two cases which I quote, in one of which for years the symptoms were very active, are sufficient to show that uncomplicated movable kidney does not "infallibly undermine life," or even necessarily impair physical or mental activity.

At the same time it must be admitted that in those cases where it is attended with marked disturbance of digestion and assimilation, the general nutrition must suffer, and the patient will be less capable of resisting any acute disease. From this point of view, movable kidney ought to have some importance in determining the value of a "life" for insurance purposes.

While the prognosis as to life is so favourable, the prospect of recovery is very slight. From its very nature, it tends constantly to increase, not only as to the mobility of the kidney, but as to the intensity of the irritation to which it gives rise. A partial recovery can only be anticipated from prolonged retention of the kidney in its normal position (either by rest in the recumbent posture, or by a suitable retentive apparatus), when the connective tissue may contract, and finally may be firm enough to oppose the the descent of the kidney.

An important point in the prognosis is the possible occurrence of hydronephrosis from intermittent obstruction of the ureter. The frequency with which hydronephrosis has been found associated with movable kidney (5 in 26 by Landau) shows that this danger is not to be overlooked.

TREATMENT.

The treatment of movable kidney is still in a very unsatisfactory condition. The indications are obvious, but difficult to carry out. The first object is to replace the kidney in its normal position, and this is usually easily effected. It usually recedes as soon as the recumbent posture is assumed, but if it does not, it is only necessary to place the hand on the abdomen below the lower border of the displaced organ, and press gently upwards and outwards. The difficult problem now arises, how to retain it *in situ*, and for this purpose many different contrivances have been used. Roberts reports a case in which very marked symptoms, especially diarrhœa, were entirely removed by wearing a tight leather belt, with a pad fixed to it in the position of the kidney. Trusses of various kinds have been extensively applied, either similar to ordinary hernia trusses, with a specially large pad to press inward under the lower end of the kidney, or modified in various ways. An ordinary tight bandage or binder has also been used, and Landau recommends the use of the corset, prolonged downwards to the level of the pubes, so as to form an artificial abdominal wall. This is probably well adapted to those cases in which pendulous belly is a prominent feature, and Newman has modified it by making it of elastic bandage, and adding a concave air-pad, to be placed over the region of the kidney. In many cases, one or other of these appliances may be of use, but each group has its defects. The bandage group cause general pressure over the abdomen, and so diminish the mobility of the kidney, but they obviously cannot retain the kidney in its normal position, and cannot therefore diminish the flexion, torsion, and compression of ureter and vessels. The truss group, if their pressure is made sufficiently strong, do keep the kidney up, but they usually cause painful and injurious pressure on other parts (bowel and nerves). I have tried Newman's bandage and air-pad, and two different trusses. The former simply increased discomfort, by causing general abdominal compression, without retaining the kidney or diminishing local pain; the latter did keep the kidney almost in its position, but caused such pressure on the subjacent structures that it could not be borne for more than two or three days. On the whole, I am inclined to think that the greatest benefit will result from avoidance of unnecessary exertion, and from spending as much time as possible in the recumbent posture. Treatment should also be directed as much as possible to the restoration of the natural pad, viz., the sub-peritoneal fat, by a diet rich in fatty elements; but unfortunately, the dyspepsia and intestinal disturbance present, usually form a serious obstacle to this. In my Case II. the symptoms have lately been much less marked, and this the patient spontaneously accounted for by the fact that within the last year or two he has, for the first time in his life, put on a little fat.

The general hygienic management is very important, especially as regards the avoidance of all violent forms of exercise (especially riding), and the proper regulation of the bowels. Any considerable fæcal delay intensifies the local irritation, especially if there be scybala in the cæcum and ascending colon. If accumulation occurs, it ought to be relieved by enemata, not by purgatives; and if at any time a purgative be given, it ought not to be one acting chiefly by increasing peristalsis, inasmuch as movable kidney, by exalting the sensibility of the intestine, renders griping peculiarly tormenting.

When an acute exacerbation of the symptoms occur, such as is liable to be produced by an unusual amount of exertion, the best treatment is rest in the recumbent posture, with a sedative to relieve the intestinal irritation. The best sedative in such cases appears to be codeia, which, according to Lauder Brunton, has "the power of lessening the irritability of the afferent fibres in the nerves of the abdominal viscera." For this purpose it is very useful, and much preferable to opium, from the absence of unpleasant after-effects. It is a mistake to treat the acute exacerbations, on the theory that they are due to catarrhal irritation, by starvation diet, &c. The only effect of such treatment is to debilitate, and thereby increase the subsequent irritability. A valuable auxiliary in the treatment is the application of dry heat by means of a hot water bag to the affected side of the abdomen.

I have seen no case of strangulation, but I should treat it on the theory which I have already expressed, viz., that it is simply a great intensification of the ordinary acute symptoms, due to sudden and great increase of the irritation. Absolute rest, opiates, and dry heat appear to be the rational indications.

OPERATIVE TREATMENT.

An important question, more especially since Keppler's dictum that movable kidney demands excision, is that of operative treatment. Two operations are advocated, and have been practised for the relief of movable kidney, viz., *nephrectomy* and *nephroraphy.* Of the former I have only to say that it appears to me to be absolutely unjustifiable in any uncomplicated case, and so extremely dangerous in a case of mobility, complicated by disease, that only symptoms of the greatest urgency can justify it. In a table of nephrectomies compiled by Dr. Harris of Philadelphia, there are 16 cases in which it was performed for movable kidney, in 13 of which the kidney was not diseased. Of these 13 patients 4 died after the operation, giving a mortality of 30·8 per cent. If we select from this table the results of one operator, viz., A. Martin of Berlin, we find 7 cases in which nephrectomy was performed for "painful floating kidney." Of these, 4 recovered and 3 died, giving the enormous mortality of 43 per cent. When we reflect that this terrible risk is incurred for the sake of a problematical relief to a disturbance purely functional, which, according to such authorities as Trousseau and Ebstein, presents no gravity in the prognosis, and "has never been known to terminate fatally," we must, I think, come to the conclusion that the extirpation of the healthy movable kidney is absolutely unjustifiable. An operation so dangerous can only be defended on the ground of a greater and more imminent danger to life.

The case is very different with regard to *nephroraphy*, which consists in cutting down through the loin, opening the capsule, drawing the kidney up, and fixing it to the abdominal wall by sutures through its own substance and that of its capsule. The results, as regards cure, of the few operations hitherto performed are described as favourable, and as it does not appear to involve any risk of life, it must be a fair matter for consideration in any case where the symptoms have become so severe as to incapacitate the patient for the ordinary duties of life. So long as the patient can move about, or even sit up with the help of a support of some kind, the question of operation ought not to be considered, more especially as the favourable results hitherto obtained have been apparently of a very qualified kind.

The various authors on the subject enjoin a tonic treatment as auxiliary to the mechanical treatment, and some observers, among others, Flemming, assert that the mobility of the kidney has been cured by a tonic treatment continued for a long time. This must be considered as highly improbable, except, perhaps in the way which I have indicated, viz., through great increase in the peritoneal fat, and the restoration of the natural pad. This might be equivalent to a cure of the mobility, but the restoration of the normal anatomical attachments is scarcely likely to result from mere "tonic" treatment, however prolonged. A more directly useful treatment seems that directed to the restoration of the normal abdominal tension, by local treatment of the muscles. For this purpose, cold douches, shower baths, faradisation, and above all, massage, are the best means to employ.

In conclusion, I may sum up my "doctrine" of movable kidney in the following propositions:—

I. That mobility of the kidney, even though slight, is no mere anatomical curiosity, but a condition of real clinical importance, producing serious disturbances of function in various organs.

II. That it produces its effects chiefly by reflex irritation of these organs through the sympathetic centres, and but little by its mechanical action.

III. That the irritation may influence the sensory, motor, or secretory functions of the organs affected.

IV. That variations in the character and intensity of the symptoms may be accounted for by variations in the intensity of the irritation, a minor intensity stimulating, and a major intensity paralysing, certain reflex centres.

V. That the so-called strangulation of the kidney is probably due, not to a mechanical or inflammatory obstruction, but to sudden and extreme intensification of the irritation.

VI. That in all cases of obscure abdominal pain, a systematic search for a movable kidney ought to be made.

VII. That a certain peculiar localisation of intestinal disturbance forms presumptive evidence of movable kidney.

VIII. That the diagnosis rests on palpation, the results of inspection and percussion being of no value, and the rule usually given as to the latter being probably contrary to the fact.

IX. That, as the condition does not threaten life, and is not inconsistent even with great longevity, no operation involving danger to life is justifiable.

X. That mechanical appliances may palliate, but cannot remove the symptoms.

XI. That the rational treatment consists in endeavouring to restore the natural pad of fat, and in diminishing the reflex irritability, and that for the latter purpose codeia is peculiarly adapted, on account of its special power of lessening the irritability of the afferent fibres in the nerves of the abdominal viscera.

CALF-LYMPH CULTURE AND VACCINATION.

By O. Penfold, M.R.C.S. Eng.

That the successful culture of calf-lymph, in this country at least, is not easy, can be at once shewn by the numbers who are known to have attempted its culture, and have after longer or shorter periods given it up as impracticable, while but a very few have patiently worked out the details until they have secured the knowledge how to count on reasonable success. Being one of those who have surmounted the difficulties, it has occurred to me to offer some practical hints on the subject and that of vaccination.

The first essential to cultivation of calf-lymph is the possession of a good "stock," that is good virus—the seed, so to speak, which is to be sown. What is now used was originally found on the udder of a cow suffering from spontaneous cow-pox, and thenceforward it has been continuously designedly cultivated or preserved up to now.

Many persons erroneously suppose that this spontaneous cow-pox is of frequent occurrence, even in this colony. I can safely assert, from long and diligent inquiry, that it is probably not indigenous, and certainly that it must be very rare, for I have never seen a case of it; and although it may not be impossible for the disease to appear at some time or other in our cattle, yet in my opinion it would be just as reasonable to expect a spontaneous outbreak of small-pox in human beings in this colony, without infection from some imported case, as it is to expect spontaneous cow-pox in our cattle.

It is very hard to convince dairymen that it is not cow-pox that is so frequently found on the teats and udders of milking cows. During the progress of my enquiries, I was once waited on by an enthusiastic farmer who had ridden in hot haste some miles to inform me that at last he had true cow-pox on one of his cows. I immediately returned with him to inspect the animal, and was not surprised at his being deceived, as the vesicles on the animal's teats bore a strong resemblance to ordinary vaccination. Still, feeling sure that it was not true cow-pox, I offered to prove that it was not, and for that purpose a calf was prepared for vaccination in the manner which will be afterwards described, and the secretion from the vesicle on the teats was then inoculated into the calf. On inspecting this animal that day week, nothing beyond the scratches of the inoculation was visible. In order to set the matter beyond doubt, I then inoculated this same calf with true cow-pox lymph of my own cultivation. At the end of the week a plentiful crop of vesicles of cow-pox resulted, and furnished a conclusive proof that the vesicles on that cow's udder were not cow-pox.

The chief countries in which the cow-pox virus has been collected, are France, Belgium, and Italy, and the cases have been very rare even in those countries, but as the virus can be as continuously cultivated in cattle as vaccination can be in human beings, this rarity of spontaneous cases does not prevent a supply of virus being obtainable at all times. In London, calf-lymph can be obtained from the different establishments advertised in *The Lancet*, and I can speak from personal knowledge that it is possible to obtain pure lymph from one of these establishments.

Having obtained, then, the first "stock," the next thing is to select a proper animal for experiment. Just as one would look for greatest success in vaccinations in a healthy, well-fed baby, so we find the best animals for calf-lymph culture are healthy heifers who have run with their mothers, getting their natural nourishment in the natural way, eight to twelve months old, and in condition what the butchers call " prime veal." In colour they should be white for choice, as the skin of a white calf when shaved is almost as pure looking as a baby's arm; quiet tempered, so as to admit of easy handling. It is almost needless to remark that such an animal in or near a town will necessarily command a high price, and here is one of the factors of the expensiveness of calf-lymph culture; still, if success of the highest order is looked for, such animals must be obtained whatever the cost. The animal is then thrown down on clean straw, and secured so that it can neither harm itself nor the operator. The part chosen for the insertion of the lymph is the space over the udder between the hind legs. This space is first clipped with scissors to remove the hair, and the part is well soaped and soaked in hot water preparatory to shaving; after getting properly softened, the parts are carefully shaved, taking the greatest care not to cause the slightest cuts or scratches, as they would tend to spoil the experiment by getting inoculated when the virus was inserted into the purposely made scratches. This part of the process is a most tedious and laborious one, and yet it is most important to have it done under the eye of an experienced operator, to see that no damage is done to the animal.

Next the remains of the shaving are carefully washed off, and the part, which should now look as smooth and pure as the human skin, dried carefully with a soft clean towel. Finally, the operator makes scratches with an instrument made for the purpose, like the marks indicating heavy rain in the weather charts, at distances of about an inch and a half from each other, to the number of twenty to twenty-five, which should give about as many vesicles if the operation is successful. The lymph properly softened is inserted into the scratches, taking care not to go beyond the skin into the deeper layers of the flesh, and the animal can be released when finished with.

That day week the animal must be carefully thrown down for examination. If the operations have been successful, a crop of twenty to twenty-five vesicles, looking something like vaccination on a baby's arm, will be visible. The lymph can be stored by inserting ivory points into the vesicles and removing as much as may be considered sufficient when dry, to be easily seen on the tip of the point; the points can be set aside to dry in the sun or in the air, or they can be used at once for vaccinating children. The lymph can also be stored in a moist state between plates of glass, and with the addition of some preservative fluid and hermetically sealing the lymph can be kept in good condition for a long time. For instance, some that I put up in this way on April 26 of this year, I used again on August 6, or 102 days after, with a perfectly successful result, while out of 162 points of my dried lymph sent out by the Adelaide vaccination office, only one case was reported unsuccessful, and this lymph must, in many cases, have been over a month old when used. Again, on August 16, of this year, I preserved a vesicle taken from the calf on the 11th day, and on October 26, or 71 days after, I vaccinated a baby with this preserved lymph in four places, all of which took in a satisfactory manner.

Having ensured a continuous supply of pure calf vaccine, it becomes necessary to remark to those who desire their children vaccinated with it, that this modern vaccine is "stronger," that is, its effects will remain visible on the arm for a longer period; thus, this year I saw a child that had been vaccinated with pure human lymph of the old type twelve days before, and the vesicles had in that short time dried up, and one had fallen off, and the others were all off two days afterwards. Another child, vaccinated at the same time with pure calf-lymph, was nearly a month before the vesicles dried up, and from 32 to 35 days before the vesicles fell off entirely. By mentioning this at the time, anxiety will be saved to the parents, and beyond telling them to avoid poulticing the arm, but to apply fresh lard, or nothing at all if the child does not seem to suffer, there is little more to be said.

A little digression may here perhaps be permissible, to speak of the astounding ignorance which prevails in most of the mothers' minds respecting vaccination. It is credited, or debited rather, with providing every possible ailment that can happen to the child during its life, and the unhappy vaccinator is blamed accordingly; while if the operation is ever so well performed, the Government pay the insignificant sum of 2s. 6d. for each case not paid for by any other way, and the parents think little or nothing of the success. In England, besides the Government fee, a special gratuity, often amounting to a considerable sum, is paid for efficient vaccination, and this latter acts as an incentive to the better performance of the operation by the vaccinators.

Here too little heed is paid to the importance of vaccination, yet the recent outbreak at Launceston should open people's eyes to its value, when all the persons who died were reported as unvaccinated. What is claimed for vaccination is protection in a limited sense. If a vaccinated person takes the disease it developes in such a one in a milder form. But to argue about the good of vaccination is futile, it has been conclusively proved to fulfil all that is claimed for it, namely, the modification of a foul and fatal disease, not prevention from it, be it remarked. No! this must be effected by strict quarantine laws, and rigid adherence and loyal obedience to them must be enforced. Too much praise can scarcely be given to the authorities of this colony, who have so ably carried out the unpopular but invaluable work of quarantine; and that, and compulsory vaccination, must be our sheet anchor against the dreaded small-pox, since we are so constantly exposed to the danger of fresh importation of disease from abroad for at least a good portion of every year. I do not fear its increase during the hot months, for the reason that its congener, vaccination, is difficult and sometimes impossible to transmit while the temperature is at our highest; and this is providential, for in my opinion, there will be less need for the protection of vaccination being suddenly required in the hottest weather. The practice of getting this done in the cooler weather must still be followed as usual. Since compulsory vaccination is, and should be, the law of this country, the objections of those who complain of the use of human vaccine must be fairly met by offering them the choice of either pure calf lymph, or pure human lymph, and this choice is now expressly printed on the "Notice to Parents," which is issued to every person on getting a child's birth registered. It is put thus: "N.B.—All Public Vaccinators are supplied with calf lymph, and parents can choose which lymph they prefer." Such being the case, I hold that the Government should obtain and retain the services of a competent vaccinator of both children and calves. It has been urged that, if it is improper for a veterinary surgeon to vaccinate a child, it is equally improper for a doctor to vaccinate a calf, but the answer is that the greater includes the less; the doctor of the present day has sufficient general knowledge to discriminate a healthy from a diseased animal—not that I wish to dispense with the services of a competent veterinary surgeon in selecting the animals; on the contrary, he should be the aid, or adjunct to the doctor-vaccinator. The establishment should be, not in Melbourne, but right away in the country, where the animals can get pure air, and where milk and pasturage are cheap and within easy reach. For efficient service, the Government must expect to pay liberally, far more liberally than hitherto, and considering the importance of the successful vaccinating of the community, it will not be grudged by tax-payers. As each calf can only be used once, just as a baby can only be vaccinated successfully once during its infancy, for the cultivation of calf-lymph continuously a large number of animals must be available. Scrupulous cleanliness must be enforced right through the work, and the nearer the resemblance of the details to the care exercised in the best human vaccination practice, by so much the greater will be the value of the product from the calf. Each point should have the date when the lymph is stored on it, and the calves should be numbered consecutively, and a record kept of every animal inoculated; both customs I recommend, from an experience of some years.

In conclusion, those who embark in this undertaking must be prepared for various troubles incidental to the work, and will need much enthusiasm to persevere till successful; but I can assure such, that by following the principles I have mentioned in this paper, a satisfactory result is but a matter of time.

Sandhurst,
October, 1887.

WEIGHT OF VICTORIAN INFANTS.

By R. H. **Fetherston**, M.B., Ch. M., L.R.C.S.I.

Resident Medical Officer, Women's Hospital, Melbourne.

As statistics giving the weight of a large number of infants born in Australia have never been published, and believing that a comparison with those of other countries would be interesting, I determined to make up the average weight of as many infants as are given in the books of the Women's Hospital, Melbourne. I submit the following as the result of an examination of 10,000 cases, being 5000 of each sex.

In 1862, Dr. G. H. Fetherston published the statistics of this hospital up to that date, and gave for 300 children, an average of 7 lbs. 11 ozs.

Mr. S. E. A. Z. Woinarski, a student at this hospital, also published in 1879 particulars of about 100 cases, giving an average weight of about 7 lbs. 3 ozs.

It is fair to suppose that the averages here given will be more exact, because based on much larger data.

I find that 5000 male infants, born between the years 1857 and 1887, weighed 37,203 lbs., thus averaging 7 lbs. 7 ozs.; and an equal number of females from the same period, weighed 36,000 lbs., or 7 lbs. 3⅛ ozs. Thus though the females are smaller, the difference is slight, viz., 3⅞ ozs. If the averages be taken in single thousands, I find that the males average about 7 lbs. 8¾ ozs., and females about 7 lbs. 5 ozs. for each thousand, with the exception of the 1000 cases of each sex, from the period of 1876-1879 inclusive. There the average for males was 6 lbs. 14 ozs., and for females, 6 lbs. 12½ ozs. This is all the more remarkable, when we remember that this period was one of great depression in this colony. During these years there were only two or three infants weighing 10 lbs. or over.

If the 10,000 cases be taken irrespective of sex, the average is 7 lbs. 5⅛ ozs.; but if the 2000 cases from 1876-1879 be excluded, the average is raised to 7 lbs. 7 ozs., and this I think, may be fairly taken as the average weight of Victorian hospital born infants.

In making up the above lists, I have excluded twins and still-born children, and regarded as premature all under 3½ lbs. The children were weighed as soon as possible after birth.

During the above period of 30 years, there were born 374 children weighing 10 lbs. or over. Of these 230 were males, the largest being 16¼, 13½, and 13¼ lbs.; and 144 females, the largest of these weighing 14, 13½, and 12½ lbs.

In the same period the weights of 247 living twin children are given, and the average was 5 lbs. 8⅙ ozs.; 139 males being about 5 lbs. 7⅓ ozs.; and 108 females, 5 lbs. 9 ozs.

When we come to compare these weights with those observed in other places, it appears, that not only is the average weight greater than in most countries, but that the number of very large children is greater. Cazeaux gives the average weight in France as from 6 to 7 pounds, and adds that the most voluminous of 3000 children born under his charge weighed 10 lbs., and that of 4000 children delivered at La Maternité, only one weighed 12 lbs. Spiegelberg, in his Text-book of Midwifery, gives the average weight for boys as 7 lbs., and of girls 6¾ lbs., and says that the heaviest fœtus he had met with in hospital was 11½ lbs. Sir James Simpson found the average weight of infants of both sexes to be 6 lbs. 13 oz. 7 drs., that of males being 7 lbs. 3 drs., and that of females 6 lbs. 10 oz. 11 drs. Dr. Alfred McClintock, in his notes to Smellie's Midwifery, reported that of 1233 mature children, born in the Dublin Lying-in Hospital in the years 1855 and 1856, the average weight at birth was 7 lbs. 3 oz. 340 grs., male children averaging 7 lbs. 6 oz. 41 grs., and females 7 lbs. 1 oz. 79 grs. The apparently largest child, in the years 1854 to 1861, weighed 12 lbs. Any one desiring to pursue the subject further will find a large amount of data, obtained from various countries, in a paper by Dr. Ogston, in the *Edinburgh Medical Journal* for January 1881.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, NOVEMBER 2ND, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. R. Aitchison, Clendinnen, A. J. Wood, Joyce, Courtenay, Neild, Grant, G. A. Syme, A. S. Aitchison, Astles, Couper Johnston, Jamieson, J. Williams, Allen, A. S. Gray, Loosli, Daish, Webb, Moloney, Barker, and J. P. Ryan.

The President, Dr. J. Williams, occupied the chair.

The minutes of the preceding meeting were read and confirmed.

The Hon. Secretary reported that Dr. Astles, formerly of Adelaide, having removed to Melbourne, had been transferred from the list of Corresponding Members to the list of Ordinary Members.

THE VACCINATION ACT.

The Hon. Secretary reported that the Vaccination Act had been carefully scrutinised by the Committee, and that apparently nothing short of a complete revision of that Act would remedy the defects which had recently been made manifest. It was impossible to make any progress in this direction during the present Session of Parliament, but steps might be taken towards the introduction of an Amending Act in the next Session.

NEW MEMBERS.

The following gentlemen were elected members of the Society:—Dr. James Coane, L.R.C.S.I., L. et L.M.R.C.P. Ed., of Brighton, proposed by Dr. J. Williams and seconded by Professor Allen; and Dr. Thomas Hodgson, M.B. et Ch.B. Melb., of Sunbury, proposed by Dr. J. Williams, and seconded by Professor Allen. Two gentlemen were nominated for election at the next monthly meeting.

EXHIBITS.

The President, Dr. Williams, exhibited:—(1.) A boy, aged 14, with aneurism of the aorta, without pressure symptoms, together with sphygmographic tracings of both radial arteries, taken two years ago. A pulsation is visible and can be felt to the right of the sternum, at the junction of the ribs with their cartilages on a level with the second intercostal space, and a double bruit is heard at the same point, and transmitted over a large area in the direction of the axilla. Two years ago the patient was treated in the Melbourne Hospital for some affection of the kidneys, and although tracings of his pulse were taken, aneurism was not suspected. The pulse tracing of the left radial is very peculiar. The line of ascent is high, with a pointed apex; the line of descent is abrupt, the notch preceding the tidal wave coming down nearly to the respiratory line, the tidal wave then rises abruptly to a higher level than the summit of the line of ascent, the aortic notch is feebly marked, followed by a feeble dicrotic wave. The tracing of the right radial is larger, the tidal wave, which comes off nearer to the apex, is less marked, and does not rise to above half the height of that on the left, and there is a well marked dicrotic wave.

(2.) An aneurismal dilatation of the arch of the aorta, removed from a man, aged 50, presenting no pressure symptoms during life, together with sphygmographic tracings of both radials. The symptoms during life were dyspnœa on exertion, but there were no signs of pressure anywhere. There was no visible or tangible pulsation. A double bruit was present over the aortic area, rather widely transmitted. The whole of the aortic arch is dilated, measuring over seven inches in internal circumference at its widest part, the walls are rigid. The pulse tracings—especially that of the right radial—are rather small, the line of ascent is short and sloping, the apex is rounded, the tidal wave comes off almost at the apex, and rises to a much higher level, and the dicrotic wave in well marked.

Both cases present many points of great interest, but they are exhibited on this occasion merely to direct attention to the importance of the study of pulse tracings, and especially the alteration in the tidal wave, in the diagnosis of aneurism of the large arteries.

Dr. R. **Aitchison** then exhibited a specimen of double kidney :—

Malformation of Kidney.

This specimen was found at a post-mortem examination at Yarra Bend recently. The subject, a man aged 33 years, had been in the asylum for eight months. He had been imbecile from admission, and grew gradually more idiotic and helpless ; lung symptoms supervening towards the close. With the exception of the kidneys, the abdominal organs were normal. There was no kidney on the left side, nor any vessels corresponding to renal vessels. On the right side the kidney was double and of irregular shape, with only one renal artery and vein, but with two distinct ureters, separately attached to a duplex pelvis. These ureters on being traced carefully downwards by Dr. Neild (who was making the autopsy), were found to proceed side by side, till they reached the brim of the pelvis, when the left ureter crossed diagonally in front of the sacrum, and entered the bladder on the left side in the usual position. The bladder was quite normal, and the renal functions during life were normally performed.

Professor **Allen** also exhibited a number of pathological specimens.

SPECIAL MEETING.

At the close of the ordinary business a Special Meeting was held.

CODE OF ETHICS.

At the request of Dr. Couper Johnston, it was resolved to postpone the consideration of the motion standing in his name, viz., "That the Society adopt a written Code of Medical Ethics."

INTERCOLONIAL MEDICAL CONGRESS.

It was resolved that the following gentlemen be appointed to represent the Medical Society of Victoria in the Provisional Committee for the next Session of the Intercolonial Medical Congress :—Drs. Allen, Jackson, E. M. James, Jamieson, Neild, and J. Williams.

British Medical Association.

VICTORIAN BRANCH.

ORDINARY MONTHLY MEETING.

WEDNESDAY, OCTOBER 26TH, 1887.

(Hall of the Royal Society, 8 p.m.)

In the absence of the President, the Vice-President took the chair

The election was announced of Dr. Davenport, of St. Kilda, and Dr. Clendinnen, of Hawksburn.

The following paper was then read :—

A CASE OF RECOVERY AFTER TAKING AN OUNCE OF CHLORAL.

BY DR. SPRINGTHORPE.

J. T. B., aged 60, occasionally intemperate, and addicted to the use of chloral as a remedy against insomnia and melancholia. First began to take chloral five or six years ago—his habit being to take thirty grains each night for two or three weeks until sleep was produced. Two years ago was nearly poisoned by a dose of ʒ ij., which, however, he slept off in thirty hours. Latterly has had a great deal of worry, and suffered from headaches.

On the 15th of September he procured ℥ j. of chloral from a chemist, ostensibly to poison some insects, but really for suicidal purposes. About 11.45 a.m. he took the poison, and was fortunately found almost immediately afterwards, and taken to the hospital within the hour. On admission he was attended at once by Dr. Boyd, the Casualty Physician. The stomach-pump was energetically used, and ether (♏ xx.) and atropine (gr. $\frac{1}{20}$)

subcutaneously injected, on the belief that the case was probably one of opium poisoning. Patient was then quite insensible; pupils very much contracted, but sensitive to light; pulse weak, irregular, and compressible; face quite livid; breathing stertorous; feet a little cold; rattles audible in the throat. In the casualty-room the battery was applied also for half-an-hour, though, apparently, without any effect. He was then removed in the same condition to the ward, and the battery applied by Drs. Halford and Anderson. Brandy in small doses was administered by the mouth; mustard applied to the chest, neck and calves; and enemata of brandy injected into the bowel. Shortly after 2 p.m., I saw patient myself. The face and scalp were then livid; the pupils semi-dilated, but insensible to light; the breathing stertorous; the pulse intermittent and uncountable; the extremities cold where not warmed by bottles, &c. From the general character of the symptoms, the special depression of the cardiac symptoms, and the state of the pupil (partly I afterwards found to be accounted for by the injections of atropine), it seemed to me rather more probable that the case was one of chloral poisoning. In addition to the Faradaic current, therefore, hypodermic injections of Liq. Strychninæ in *m.* ijss. doses, with equal parts of water were administered, four in all, at short intervals. About this time patient's son arrived with the news that it was a case of chloral poisoning. Thence onwards till 7.30 p.m., the Faradaic current was applied, more or less constantly, both cutaneously and percutaneously, to præcordia, abdomen, arms, and slightly to the scalp. At first muscular reaction was faint, and confined to the particular muscles underneath the rheophore. There were no symptoms of cerebral action or of sympathetic movements in other parts; all the reflexes were absent. Gradually, however, there were signs of the impressions producing some effect upon the cerebral centres, indications that their action was gradually returning, and the muscles of face and arms would move when the rheophore was applied to the abdomen or leg. The breathing became less stertorous, and about 7.30 p.m., after application of the current, he muttered unconsciously, and shortly afterwards became so far sensible that he could give his name and address.

At 8 p.m. the plantar reflex returned; he could answer questions when roused, but not very coherently; the extremities were warm, pulse fairly good, breathing still slightly stertorous, pupils re-acting very slightly. The injections of strychnine were discontinued, stimulants were also forbidden; he was given hot coffee, and the battery applied at gradually increased intervals. At 11.30 he was quite sensible, talked intelligibly, was inclined to sleep, but easily roused; his urine was drawn off, and some liquid food administered. During the night a special watch was kept, and sleep prevented from becoming deep or continuous.

The next day he was placed upon strychnine and diuretics. For some days afterwards traces of venous congestion, cardiac depression, and cerebral irritability remained. The digestion was very poor, and the general health affected. He remained in the hospital under treatment until the 15th of October, when he was discharged.

Remarks.—Assuming that the quantity taken was as stated, this case seems one of recovery after the maximum recorded dose of the poison. The action of chloral is known to be erratic, small doses producing often alarming symptoms. The greatest quantity recorded in Wood's Therapeutics as having been taken with recovery was 460 grains. In the present case, the speedy evacuation by the stomach pump rendered recovery possible, and a subsequent fatal ending was apparently averted mainly by the Faradaic current, and to a less degree by the strychnine, warmth, and alcoholic stimulation.

Dr. Henry considered the paper valuable as showing the good effects of perseverance. Poisoning by chloral was common in Germany, where reliance was placed on warmth, and the Faradaic current.

Dr. Black thought the paper showed the tolerance of the drug, though disputed by some. He remembered a case in which ½ cwt. was taken in five years, and the habit was given up without any trouble.

Mr. Shepperson then read a paper on the action of certain ferments upon starch, albumen, fibrin, casein, &c., with illustrative experiments.

Upon the motion of Dr. Simmons, seconded by Dr. Henry, the cordial thanks of the Branch were tendered to Mr. Shepperson, for his interesting series of experiments.

The inspection of an extremely interesting exhibit of specimens by Messrs. Burroughs Wellcome and Co., showing the progress of pharmacy during the past year, concluded the proceedings.

Hospital Reports.

MELBOURNE HOSPITAL.

Four Cases of Supra-Pubic Lithotomy.

Among the improvements of modern surgery, a place by no means unimportant must be assigned to the re-introduction of the supra-pubic method of operating for stone in the bladder. The operation is perhaps as old as surgery, and it is very strange that after being practised with marked success by Cheselden, it should have again fallen completely into disuetude, to be revived again in these latest days. Considering how simple the operation, how unimportant the structures likely to be wounded (for, with ordinary care, the peritoneum is in no danger), the absence of blood-vessels of any size, it does seem strange that operation through the perinæum should so completely have kept possession of the field.

In the *Medico Chirurgical Transactions* for 1886, Barwell has a short paper on "Supra-Pubic Lithotomy," Rivington reports a case in which he removed, by this method, a stone weighing over twenty-three ounces, and Jacobson also reports a case of supra-pubic lithotomy with remarks. Barwell says, that for female children, probably for females of all ages, whenever lithotomy is necessary, the high operation is preferable to all other methods; in boys, any stone large enough to render laceration of the prostate probable, during its removal through the perinæum, should be taken out above the pubes; in adult males, any stone weighing two ounces, unless amenable to lithotrity, should be removed by the high operation. He says that, save in a few very rare cases, distention of the rectum is unnecessary.

Jacobson says that this method will be found of great value by those who only deal with stone occasionally, and who find themselves face to face with calculi of considerable size in adults; that the operation will be found useful in many cases of hard stones of one and a half inches in diameter, in multiple hard stones, in cases of calculus, not phosphatic, occurring with enlarged prostate, in some cases of foreign body in the female bladder, with abundant calculous deposits (Sir H. Thompson); also in rarer cases of a state of the urethra, which will not admit of the use of a lithotrite; a very deep perinæum; a child with deformed pelvic outlet; a patient with anchylosed hip-joint, not admitting of his being placed in the usual lateral lithotomy position (Sir H.

Thompson); that at present it will be wiser not to attempt to close the bladder with sutures.

In the earlier part of this year, the following cases were operated on by this method in the Melbourne Hospital:—

Case I.

Under the care of Mr. J. H. Webb.

Reported by Dr. W. Moore.

G. J., æt. 17, plate-layer's assistant, was admitted into Ward 18, on February 2nd, 1887. The patient has been ailing for the last three months. Whilst at work he is troubled with very frequent micturition, and at night his water passes from him unconsciously. There is a fair stream at the beginning of the act of micturition, at the end it only comes in drops. He has occasionally passed blood in the urine. The stream sometimes stops suddenly, and then the urine comes away in drops. The urine had a specific gravity of 1016, was acid in reaction, showed a whitish deposit; albumen was present, but no phosphates; there were pus cells and mucus.

February 26, 1887.—The patient was anæsthetised and 10 ounces of perchloride of mercury solution (1 in 2000) injected into the bladder. The rectum was not distended. An incision, two inches in length, was made in the midline, immediately above the pubes. The anterior wall of the bladder was thus exposed. It was then punctured, and a blunt hook was introduced to hold forward the bladder. The incision was enlarged so as to admit the forefinger, along which an ovum forceps was introduced, and by means of this the stone was easily extracted. There was somewhat free hæmorrhage from the bladder wall, but it soon ceased. The bladder wound was closed by two silk sutures. The external wound was closed by deep wire, and superficial horse-hair sutures. A drainage tube was left in the lowest part of the wound. It was dressed with iodoform and absorbent cotton. A soft catheter was left in the bladder through the urethra. The stone was a mulberry calculus, oval, $\frac{2}{3}$ inch in its longest, $\frac{1}{2}$ inch in its shortest diameter.

February 27, 10 p.m.—Temperature 102·6°. Pulse 160. Breathing thoracic. Tenderness over the lower part of the abdomen. The lowest suture in the external wound removed, and a large quantity of dirty fluid evacuated. As no urine was coming through the catheter, it was removed.

March 2.—Temperature 99·4°, evening and morning. Some urine coming through penis. Abdominal tenderness less. One wire and three horse-hair sutures removed.

March 5.—Temperature 100° evening, 99° morning. More urine coming through the penis. Some small concretions passed per urethram.

March 14.—Very little water coming through wound, which is healing up well.

March 19.—During the last few days some large sloughs, about half an inch square have come away through the wound, all more or less coated with concretions.

March 22.—No urine coming through the wound, which is almost healed. Discharged.

April 14.—Was at Hospital to-day. Is quite well. Wound healed completely very soon after his discharge from the Hospital.

Case II.

Under the care of Mr. T. M. Girdlestone.

J. J., æt. 17, carpenter, was admitted into the Melbourne Hospital on March 3rd, 1887. He was in a very low condition, his pulse being extremely feeble, his tongue and hands tremulous. He has been complaining of urinary trouble for the last four years; he can only pass his urine in drops, and that apparently with much difficulty. There is great pain in the loins and the abdomen. He says that while passing urine the stream used sometimes to stop suddenly; he has never passed blood in the urine, and has never suffered from renal colic.

On passing a catheter there was found to be no obstruction in the urethra; the bladder was quite empty of urine; grating was felt on the left side of the bladder. With a sound a stone is distinctly felt, and a click is heard.

He was ordered the hst. ferri. perch., with tinct. bellad. m. xv. every four hours. After three weeks' rest in bed, with careful feeding and treatment, the boy's condition had so far improved as to admit of the removal of the stone. He was now able, with much straining, to pass a small stream; there was pain before, during, and after micturition. As the stone was found to measure over an inch and a half, and as the condition of the bladder and urethra would not permit of the use of a large lithotrite, Mr. Girdlestone decided to remove the stone above the pubes. Chloroform having been administered, a bag was introduced into the rectum, and a small quantity of fluid injected. The bladder was washed out with a 5 % solution of boracic acid, another 10 oz. of the same fluid was injected into the bladder, and retained there by an india-rubber band tied round the penis. An incision two inches in length was then made in the mid-line, immediately above the pubes. The linea alba was divided on a director, the Pyramidales were drawn apart, the Recti muscles were separated by a broad blunt director, and the anterior wall of the bladder was brought into view by separating the fat on its surface with a director. The anterior wall of the bladder was held up by means of a sharp hook, and Mr. Girdlestone made a small incision, through which he first introduced the index finger of one hand, then that of the other, and thus dilated the opening. He then seized the stone with an ovum forceps, and slowly extracted it, gradually dilating the opening in the bladder by its means. There was very little hæmorrhage. The bladder wound was closed by three tendon sutures, passed through the outer and middle coats. The recti muscles were next stitched together, and finally the skin edges were accurately closed by sutures. A drain tube was left in the lower part of the wound, but not in the bladder. Before the dressings were applied, the patient was seized with vomiting, and a little fluid was forced through the closed wound. This was now dressed with iodoform powder and perchloride of mercury gauze. Morphia gr. ¼ was administered hypodermically, and a rubber catheter was retained for three hours to drain away the urine while the vomiting continued. For the next 24 hours his urine was drawn off every three hours, except at midnight following the operation, when he passed urine naturally. From the second day to the fifth after the operation he was able to pass his water naturally; on one occasion he passed as much as a pint, on another half a pint, so that the bladder wound must have healed by the first intention. For about a week he vomited almost constantly. He retained a certain amount given by the bowel, but became very much weakened. Five days after the operation a little urine came for the first time since the day of the operation through the wound. At this time he retained a little peptonised milk. A few days later the superficial wound gaped widely. After about a week the vomiting ceased; the urine continued to come through the wound, some coming through the penis also. Seventeen days after the operation the patient was suddenly seized, after coughing, with severe hæmorrhage in a continuous bright red stream from the right side of the wound. Mr. Girdlestone arrested this by inserting two acupressure needles, and then placed a sponge on the wound. His temperature was always a little up at night. He became very sallow in appearance, There was a good deal of mucus in the urine, cough became troublesome; he gradually became weaker, though he was taking a fair amount of nourishment, and the wound was showing healthy granulations. A little more than a month after the operation there was great pain in passing water through the penis, his cough continued troublesome, his appetite failed, and vomiting came on; these symptoms continued, and he died on 29th April, 37 days after the operation. He was found after death to have been suffering from pyelitis of some standing; the liver also presented patches of degeneration.

CASE III.

Under the care of Mr. GIRDLESTONE.

J. G. T., æt. 64, paperhanger, was admitted into ward 8 of the Melbourne Hospital, on the 14th February, 1887. For the last two years he had been suffering from persistent pain at the end of the penis; this pain is worse during and immediately after micturition, and after movement or jolting. He suffers from frequent micturition. He passed bloody urine two years ago, but none during the last eighteen months. Sometimes, while micturating, the stream suddenly stops, and then the urine comes away in drops. He has a good deal of tenesmus. He has been sounded several times, but no stone could be detected. His urine was acid, and showed no deposit. Is very sleepless at night. Cocaine injections were used to ease the pain in the penis, and morphia was given by the stomach to induce sleep. The perinæum and thighs were painted with strong iodine.

On March 31st, the patient's bladder was examined with a sound under chloroform, and a stone, measuring 1½ inches (by lithotrite) detected. Following the sounding, there was a considerable rise of temperature, with loss of appetite.

On the 9th April, after ¼ gr. of morphia had been injected under the skin, the patient was anæsthetised with chloroform; anæsthesia was then maintained by the A. C. E. mixture. Mr. Girdlestone seized the stone a few times in the lithotrite and crushed it. He then washed out some small fragments. It was only possible to seize the stone when the lithotrite was pointing upwards and forwards. After washing out the few fragments, it was impossible to feel the stone either with a lithotrite or sound. Accordingly, it was decided to at once do supra-pubic lithotomy. The bladder was washed out with boracic acid lotion (5 per cent.), an india-rubber bag was passed into the rectum, and ten ounces of water injected into it. Ten ounces of boracic lotion were then injected into the bladder and retained there by an india-rubber band tied round the penis. An incision, about two and a half inches long, was then made in the midline, above the pubes, down to the anterior wall of the bladder. This was elevated by a sharp hook and a small incision was made into it, and this small opening was dilated with the fingers. The fragments of stone were then removed by means of a forceps, which, owing to the great elongation of the bladder, had each time to be turned upwards towards the umbilicus in order to seize the pieces. There were no fragments in the pelvis towards the prostate. The bladder was then well washed out with boracic lotion; a drain tube was inserted into the wound and left to hang over the bed. The upper and lower parts of the wound were united by a few sutures. The wound in the bladder was not closed. A morphia suppository (gr. j) was given, and the patient was put to bed with hot bottles to his feet, and hot fomentations to perinæum. The wound was dressed with a few layers of perchloride gauze, and two large sponges were placed over it to absorb the water.

After the operation the patient progressed favourably; the temperature did not rise above 100° F. in the evening. Three days after the operation, several small fragments of stone came away in the urine. The water at first all came through the tube; this was removed six days after the operation. The wound healed well by granulations. A catheter was passed about three weeks after the operation, there was no obstruction to the passage of urine. Twenty-four days after the operation, the patient was allowed up, and on the following day he passed urine through the penis for the first time. The wound continued to heal by granulation, and on June 3rd, he was discharged cured.

[*Remarks.*—This case demonstrated the fact, that a stone in the bladder can lodge above the pubes. Before the operation it had been on some occasions impossible to find it with the sound.

During the operation of crushing, and after the stone had been broken four or five times, all the fragments slipped away out of reach of the lithotrite. It was then determined to complete the operation by cutting, and on opening the bladder above the pubes, I passed my finger through the wound downwards to the neck and base, there was no stone there, and this part of the viscus was somewhat contracted, while its upper part was remarkably elongated. As I particularly pointed out at the time, the lithotomy forceps were passed upwards towards the umbilicus every time they were introduced, and all the fragments, large and small, were extracted from the summit of the bladder. The stone had been broken by the lithotrite at the first part of the operation into three larger and numerous smaller fragments, with a quantity of débris; the largest fragment weighed 74 grains, and the total weight of all when dry, was 380 grains.—T. M. G.]

CASE IV.

Under the care of Mr. E. M. JAMES.

Reported by Mr. G. T. HOWARD, House Surgeon.

W. K., æt. 25, a tall, fairly well-nourished, but very nervous subject, was admitted to the Hospital on March 11, 1887, with a history of vesical calculus for fourteen years. Pain during, and at the end of micturition, had been the most prominent and constant symptom all through, the other symptoms having intermitted occasionally. Urine had a specific gravity of 1030, was acid and albuminous, and had a white flocculent precipitate. A large hard stone, a little over an inch long, was detected when a sound was passed. Before operation the patient was kept in the Hospital for a month, the treatment consisting of rest, vesical sedatives, and non-nitrogenous diet.

On April 12th, the patient being anæsthetised, Mr. James made an incision about two and a half inches long in the median line, just above the pubes. Previously, the bladder had been filled with thirteen ounces of five per cent. solution of boroglyceride, and the rectum dilated with a bag containing eleven ounces of water. When the bladder was reached, the overlying veins were pushed aside with a director, a sharp hook introduced through the coat of the bladder and an incision made on to the hook. The stone was then removed without much difficulty by an ovum forceps. It was about 1⅛ inches long, nearly oblong in shape, and seemed as if three separate cuboid mulberry calculi had been connected by some whitish cementing substance. The bladder was then washed out with warm boroglyceride solution, and one wire suture was used to bring the skin edges together at the upper end of the wound. No other sutures were used. An india-rubber tube three feet long and a quarter of an inch in diameter was then fixed in the bladder by means of an external wire suture, and the wound dressed with perchloride of mercury gauze and a large sponge; the whole being kept in position by a half sheet. The outer end of the tube was conducted, to save excoriation, into a urinal beside the bed; a catheter was not tied in.

April 13.—Had a good night; temperature 99·4° night, 98·4° morning; pulse 80, slight tenderness around the wound, which was dressed to-day. Urine coming freely through the tube, at first blood-stained, now normal in colour. At first there was slight oozing of urine through the wound beside the tube, but that has now ceased. The wound continued to look well; the wire suture was removed on the 14th, and the urine came *per urethram* for the first time on the 17th, having passed wholly through the tube until then. There was, except on the first day, no oozing beside the tube, and consequently patient was not at all excoriated about the hips. Acute attacks of tympanites, however, caused a great deal of trouble, and were relieved best by enemata of assafœtida.

The tube was removed on the 19th, a week after the operation, and the urine then flowed freely from the wound, which looked perfectly healthy. The perchloride gauze and sponge were now changed about half-a-dozen times daily. He continued to improve until the 28th of April, by which time all the urine was coming through the penis, and the surface of the wound granulating well. He was allowed up for the first time on the 29th of April, with the result that the urine once more began to come in slight quantities through the wound, and continued to do so until the 3rd of May, by which time it was all passing through the penis again. From that date onward recovery was uninterrupted, and patient was discharged cured on the 23rd of May, six weeks after operation.

On August 18th, Dr. Kilpatrick reported from Yarra Flats that the patient was perfectly well, working as a navvy there.

W. M.

ALFRED HOSPITAL.

Case of Phthisis, Improvement following Abscess of Thyroid Gland.

Under the care of Dr. ADAM.

Reported by A. S. JOSKE, M.B., Resident Physician.

W. H., a sailor by profession, aged 26, was admitted into the Alfred Hospital on June 28, 1887. He had been ill for about five years, with cough and expectoration of thick yellow phlegm, occasionally stained with blood; there had also been some slight attacks of hæmoptysis. He had emaciated considerably, and suffered from occasional night-sweats. He had had gradually increasing aphonia during the last three months, and had been unable to do any work. His weight was 9st. 12lbs.

On admission he was very feverish, the temperature being 103°. Had impaired mobility of the right side of the chest, and dulness on percussion, bronchophony, friction, and large moist crepitation over the right sub-clavicular region. There was tubular breathing at the right base and at the left infra-clavicular region. Heart sounds weak, regular; tongue moist, thickly coated. He was given hydrarg. subchlor. gr. v., followed by small doses of quinine three times a day. Counter irritation was applied to the right chest anteriorly by Empl. Lyttæ. 1 x 1, three blisters being used.

July 1.—The temperature being still persistently high, antipyrin gr. xv. was given every night.

July 3.—The aphonia became very troublesome, the vocal cords were found to be congested and pear-shaped, and argent. nitr. gr. x. ad ℥j was applied, and the cough being very troublesome, tr. benzoin co. was given for inhalation, and cod-liver oil given internally.

July 7.—A large swelling formed in front of the thyroid gland.

July 12.—An abscess had formed over the gland and was opened.

July 16.—Pus was discharging freely. The temperature had fallen to normal, and the cough and expectoration were not nearly so troublesome.

July 24.—His weight was 10st. 8lbs.

August 4.—His weight was 11st. 5½lbs. The abscess is kept open; his cough is not so great; his general condition was much better. The dulness was not so marked, and the râles were not so coarse.

August 8.—His weight was 11st. 7½lbs.

August 15.—He was given some iron as well as cod oil.

August 17.—His weight was 11st. 13lbs.

He was discharged on September 1st, his weight then being 12st. 4lbs. He had hardly any cough, and the abscess had closed four days before. He has not since returned to the Hospital.

The marked improvement, following the formation of the abscess in the neck and the continued discharge from it, may be taken as a sign that the old system of using violent counter-irritation, by means of setons and issues, may not be out of place still in some cases; though it may not be easy to determine beforehand what these cases are.

Cholecystotomy.

Under the care of Dr. O'Hara.

Reported by C. H. Molloy, M.B., House Surgeon.

Mrs. N., æt. 43. Previous history.—Three months before admission was laid up for a couple of weeks with a febrile attack, having severe pains in the right side and back, was told she had typhoid fever. On recovery, she noticed on the right side, just below border of ribs, a hard lump, which was very painful especially if she coughed or stooped. This swelling increased rapidly in size, and as it did so pain disappeared. One month before admission, she had gone to a private hospital, where the tumour was tapped and a large quantity of pus evacuated; was told it was hydatid. Since then the cyst has refilled, but gives her no trouble.

On admission, there is no sign of cachexia or jaundice; complains of no pain; has foul tongue; constipation. Temperature is 101° at night, nearly normal in the morning. On the right side, just below border of ribs, is a prominent globular swelling, uniform, painless, tense, yet giving distinct sense of fluctuation, fairly movable. Dull on percussion, with tone of resonance all around, except at upper and outer part, on deep percussion. Dulness is found continuous with that of liver; is uninfluenced by respiration. On exploring, a little pus was drawn off, but no hooklets were found.

Operation took place a week after admission. Dr. O'Hara, under strict antiseptic precautions, made a vertical incision over centre of tumour, just about in line with nipple. On reaching the peritoneum, adhesions were found, and an opening was made into

the cyst; a large quantity of pus, not bad-smelling or stained with bile, was evacuated. The finger was then introduced and a large gall-stone removed, which was occluding the cystic duct. This stone was about the size of a quondong, and was marked with several facets. The cavity was then washed out with boracic lotion; a drainage tube introduced; silk sutures used. The wound was dressed with absorbent wool and boracic acid in powder. After the operation a large quantity of pus continued to be discharged till the 6th day, when it began to get bile-stained, and soon after the discharge was chiefly pure bile, pus gradually disappearing. Temperature in a few days became normal, rising again a little on the 7th day from pus bagging; but after the 11th day it was normal night and morning. Powdered boracic acid on absorbent wool was continued as dressing. The drainage tube was gradually shortened, till on the 19th day it was removed, the discharge being then only a few drops of bile. Five weeks after operation the patient was discharged cured, there being no re-accumulation.

Australian Medical Journal.

NOVEMBER 15TH, 1887.

REPORT OF THE CENTRAL BOARD ON TYPHOID FEVER.

In addition to the Annual Report issued a few months ago, the Central Board has now published a Special Report on Typhoid Fever. In the first part of this new document there is a general discussion of the prevalence of the disease in the Colony, and of the chief causes which have led to the continuance of severe outbreaks, when from most parts of the world we have reports of steady diminution of mortality, following the adoption of sanitary improvements of various kinds. It cannot be said that in this part there is much that is new, and perhaps, after the great amount of inquiry which has been made, there was not great room for novelty. The contagiousness of the disease is strongly upheld, though we think that public and professional opinion on that subject is more advanced than the authors of the report are inclined to believe. It is an easier matter, on many points, to alter professional and popular opinion, than to get an equal improvement in practice, and the improvements needed in order to bring the sanitary condition of Victoria generally, and Melbourne itself, to the level of modern requirements, are neither few nor small. A proper system of drainage of the metropolis, for instance, is a gigantic scheme, and while it is difficult to have patience with the delays which have occurred, it is apparent that they are the result of local jealousies chiefly, which, however foolish in such questions, are hard to overcome. On the necessity for improved drainage, stress is rightly laid, and striking instances are given of the benefits which have resulted from its adoption in Europe. The second remedy suggested is improved disposal of nightsoil, and here again there can be no doubt that much could be done both in town and country. The chief suggestions are, that there should be daily removal of typhoid excreta, and if possible, its destruction by fire, and where this cannot be done, the free use of disinfectants with quick removal and burial of such excreta. It is rightly recognised that it is useless to expect that true disinfection will constantly be carried out in an efficient manner. Everywhere, Melbourne included, there is room for great improvement in the general working of the pan system. Proper precautions for guarding the water supply of towns, and for avoiding contamination of milk are also referred to as necessary, and suggestions made for the more thorough carrying out of sanitary work by the officers appointed by the local boards. The last point discussed is that of compulsory notification, without which, as is rightly pointed out, there is almost no chance of checking an outbreak of epidemic disease in its beginnings. Of course, it is also recognised that notification, without power to isolate cases of infectious disease, would be deprived of half its value. The powers of both the central and local boards being at present limited, it is urged that there should be no delay in passing the Amending Health Bill. Most persons will be prepared to admit the importance of the suggestions made, and this being the case, it is unfortunate that certain clauses in the Bill have been drawn up in such a way as to provoke opposition, serious enough, apparently to destroy all chance of any progress being made in the present session towards making its provisions law. Every enlightened health officer must have felt the need for compulsory notification of infectious disease, but the means proposed for carrying it out could hardly have been put in a way more calculated to excite the opposition of the profession. And as we pointed out before, when discussing the principles embodied in the Bill, the clause enjoining the notification of all cases accompanied with eruption is nothing less than absurd. It is perhaps on the whole well, therefore, that the Bill is to be withdrawn, and when it appears again, we may hope that some of its aggressiveness and crudities will be found to have disappeared.

The most interesting part of the report is contained in an appendix, giving the results of an inquiry into the outbreak of typhoid fever, among the pupils and others in the Geelong Grammar School, in May last. Dr. Shields, by whom the inquiry was conducted, is strongly of opinion that the outbreak, extending to twenty-four persons, had its origin in the use of contaminated milk, though it was admitted that the general sanitary condition of the school and its surroundings was in some important respects unsatisfactory. It is impossible in the space at our disposal to criticise in detail the conclusions arrived at, but we must confess, that the evidence of the milk supply having been specifically contaminated, is not in our opinion at all conclusive. There was no suspicion of contamination of the general stock of milk at the dairy, from which the school was supplied, but a small amount was occasionally got by the owner from another source, which might readily enough have been contaminated with the typhoid virus. But the chain of proof was defective in this important respect, that this milk suspected of having contained the poison, was not shown to have spread the disease among the persons who certainly made use of it, and further, there was something like satisfactory evidence that this outside supply was not taken to the school. To meet these objections, the suggestion is offered that the can, which had conveyed this small occasional supply from the one dairy to the other, had not been properly washed, and that the wholesome milk afterwards put into it had, by mere contact with the vessel, been sufficiently impregnated with the virus to impart the disease to the large number of persons above mentioned. This is the weak part in the case, and though we cannot fully accept the conclusions arrived at about the cause of the outbreak, it must be said that the investigation was evidently made with great care, and the report of the inquiry is deserving of careful perusal. It is certain, also, that the conditions were so complicated as to admit of distinct differences of opinion, the fact being, that Dr. Carstairs who followed the inquiry, and had the advantage of local knowledge, arrived at quite opposite conclusions.

Reviews.

SCHMIEDEBERG'S PHARMACOLOGY.*

In translating Professor Schmiedeberg's book, Dr. Dixson has rendered a valuable service to English-reading physicians. Notwithstanding our boasted advances in scientific medicine, our increased precision in diagnosis, our more exact pathology, and our crowds of new chemical drugs with polysyllabic names, it is much to be doubted whether there has been, among the majority of the profession, any commensurate advance in truly *rational* therapeutics. Remedies are still selected too often under the influence of blind empiricism, vague tradition, or sheer credulity and superstition, and it would not be difficult to quote instances in which remedies still used derive their original sanction from astrology or other exploded delusions, or from some confused mental association. Thus the use of nitrate of silver in mental and other nervous diseases is a direct descendant of astrological doctrine; while the daily recommendation of *red* wine as an appropriate remedy for anæmia savours more of the ancient

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* Elements of Pharmacology. By Dr. Oswald Schmiedeberg, Professor of Pharmacology, University of Strassburg. Translated by Thomas Dixson, M.B., Lecturer on Materia Medica in the University of Sydney. Edinburgh: Young J. Pentland, 1887. Pp 223.

"Doctrine of Signatures," than of modern scientific teaching. But therapeutical, like other superstitions, die hard, and therefore it is that we welcome the appearance, in an English dress, of the valuable work of Schmiedeberg, for no better antidote to the bane of empiricism and credulity could be desired. From beginning to end its method is rigidly scientific, and it may be summarily described as consisting of an enormous body of skilfully arranged pharmacological facts, based upon experimental observations. Strictly speaking, it is open to only one kind of criticism, viz., a criticism based on independent experimental results. We shall, therefore, content ourselves with giving a brief account of the scope and contents of the work, and add only one or two comments on some passages where the author passes from the domain of pharmacology into that of therapeutics.

In the outset it is necessary to observe that the book "contains in abstract only that part of the science of remedies upon which it falls to the pharmacologist to form a judgment, and it is therefore neither a book of prescriptions nor a compendium of treatment." The nearest approach to therapeutics demanded of the pharmacologist is from "pharmacological facts to formulate general rules for the employment of remedies." The facts contained in the book represent not only the labours of all European pharmacologists, but also the results of fifteen year's work in the author's laboratory by "a number of younger investigators working under his guidance," and some idea of the enormous labour of which the condensed outcome is here presented, may be formed from the fact that the index of authors at the end of the volume contains no less than 321 names.

The book opens with an introduction, written in a broad philosophical tone, briefly reviewing the relations of experimental pharmacology and therapeutics, the nature of pharmocological actions, the sources of therapeutics, the rational guides to the choice of remedies, and the classification of remedies.

Chapter I. discusses very fully the "nerve and muscle poisons," classed in various groups, *e.g.*, the strychnine group, the caffeine group, the ergot group, &c., according to the affinities of their actions. This chapter includes all the alkaloids, and in addition, the alcohols and ethers, the ammonia group, and prussic acid. The physiological actions of each group are given in detail, and the indications, or absence of indications, for their therapeutical use, are stated. As an illustration of the minute accuracy observed throughout the book, we may mention that the "aconitine group" includes five different alkaloids, viz., (1) crystallisable aconitine, (2) pseudaconitine, (3) japaconitine, (4) delphinine, (5) staphisagrine, and that the various actions of these five are duly differentiated. The atropine group and the ergot group are differentiated with equal minuteness.

Chapter II. gives an account of various substances "which, through their molecular properties, cause alterations of various kinds at the point of application." Under this vague title are included a number of very different groups of remedies, differing so widely as cutaneous irritants, aperients, anthelmintics, aromatics, and bitter stomachics.

Chapter III. takes up the action of water and of saline solutions, the action of saline cathartics finding full and excellent exposition, and valuable indications for their use being given.

Chapter IV. treats of "chemical cauterisation by means of alkalies, acids, halogens, and oxidising substances." The title of the chapter gives no adequate idea of its valuable contents, which are far from being restricted to "cauterisation," and include many other actions of acids, alkalies, and halogens.

Chapter V. contains a most valuable account of the "compounds of the heavy metals and aluminium as nerve poisons, muscle poisons, and escharotics." The sceptical treatment of doctrines, ordinarily regarded as established, *e.g.*, the hæmatinic effects of iron in anæmia, will probably excite the mingled surprise and indignation of the orthodox prescriber. The admirers of phosphorus will also receive a shock from the following passage:—"These actions yield *no rational indications* for the therapeutic employment of phosphorus, excepting for the formation of firm osseous substance. Even the trials of the remedy in the most widely different affections, have till now led to no empiric indications. The dangers attending the use of phosphorus do not at present justify the retention of this powerful poison in therapeutics."

Chapter VI. gives the "general actions of the aromatic compounds," including creosote, carbolic acid, salicyl compounds, the numerous members of the pyridine group, &c. Resorcin, kairin, chinolin, and antipyrin, receive but scant mention, and on the whole, this chapter is less satisfactory than its predecessors. Still less satisfactory, however, is Chapter VII., on "digestive ferments and food stuffs," which dismisses in two or three sentences, the whole important subject of pepsin and peptones. Yet even here a useful warning is given, that "the pepsin wine and other preparations which contain glycerine, exercise by no means a favourable influence upon the stomach." The book concludes with Chapter VIII., on "mechanical and physically acting remedies," including all kinds of dressings, plasters, ointments, and poultices. Only a few sentences are devoted to each of these.

It is very difficult, without undue quotation, to give an adequate idea of the value of this book as a record of scientific fact, but we venture to give the following quotation, from the section on mineral waters, as showing the spirit by which the author is actuated: "Whoever believes in a difference between artificial and telluric heat, whoever lays stress on the occurrence of infinitesimal traces of certain rare constituents in a spring, or allows even electric currents in them to exert an influence, and in general, perceives in mineral waters something other than physical agents, and other than solutions of the substances contained in them, whoever acts thus, deserts not only the field of science, but even that of a pure empiricism, and betakes himself to the realm of faith, and of the medical dogmatism of the vulgar."

The one fault which we would venture to find with the author is, that his demand for "rational indications" is at times too insatiable, and that he occasionally condemns an unfortunate drug on the ground of its pharmacology without, as it appears to us, admitting any *clinical* evidence in its favour. To give only a single example, he makes the startling statement that "aconite, therefore, which was introduced in the course of last century by Storck, can now be considered without hesitation as an obsolete remedy." Most practical physicians will protest against such a conclusion.

The translator, who is also known as an original investigator, and is quoted in the text, has done his work admirably. We have not had an opportunity of comparing the translation with the original, but the almost total absence of ambiguity, parenthesis, and Teutonic involution of style, will surprise all who are familiar with German scientific writings; and all who have ever attempted to render such works into English will appreciate highly the labour and care bestowed by the translator.

May we suggest that the uniform use of the word "appearance," apparently as an equivalent for "Erscheinungen," is at times awkward, and that the following sentence is perhaps oracular, but certainly obscure:—"There is no well-founded reason for administering pepsin with wine; we may just as well give them along with each other"!

The book is enriched with seven diagrams, shewing the effects of various drugs on blood-pressure and respiration. It is got up in the excellent style for which the publisher is already distinguished, and we earnestly recommend it to all who wish to base practice on science, and to be able to give good grounds for the therapeutic faith that is in them. D. G.

We have received two publications bearing on the subject of Massage. The first consists of three popular lectures, delivered at the West End Hospital for Nervous Diseases, by Dr. T. Stretch Dowse, and published under the title of "The Modern Treatment of Disease by the System of Massage."

We may at once say, that the booklet has no claim to serious criticism. The author defines Massage as denoting "various manipulations by which inactivity is made active, and apathy, atony, and indifference are made excitable, powerful, sensible, and sensitive. In other words, morbid inertia is transformed by massage into vital, active, and potential energy." This extraordinary looseness of language and idea prevades the entire book, The author believes in something which he calls moral or spiritual Massage, which he says, "is spiritual, physiological, moral, sympathetic, and intellectual," and which he elsewhere defines as "Massage, not only by the hand, but by the spirit, by the will, and by the intellect." He believes that Massage can impart from the masseur to the patient, "vitalised energy," which is as distinct from "energy imparted by mere mechanical aid, as the vitalising agency of the sun, in comparison with that of the moon." He describes how, in certain cases, he produces by stroking the forehead and face, &c., a condition of hypnotism, and adds:—"I usually perform these manipulations whilst charged myself with electricity, and so convey the electric current by Massage to my patient." Surely all this is almost on a level with the cant of the professional mesmerist, "electro-biologist," clairvoyant, or faith-healer, and as we have said, unworthy of serious criticism. The book is a farrago of pseudo-metaphysical, pseudo-scientific, and wholly confused ideas, and that such a production should bear on its title page a name of good repute, adorned with half a score of honourable titles, is well fitted to "make the judicious grieve"

The second work, though less pretentious in style and appearance, is calcuated to be much more useful. It is a pamphlet, containing a reprint of an article by Dr. Grant, of this City, contributed to the *Edinburgh Medical Journal* for July and August last. The *rationale* of the system is explained, and the various manipulations carefully described after observations made under the guidance of Professor von Mosengeil, of Bonn, who is probably its most scientific exponent. A number of cases are detailed for the purpose of showing the benefits to be derived from Massage, and also to point out the limits to its useful application. To those who are interested in this new physical method of treatment, we can recommend Dr. Grant's contribution to our knowledge of the subject, as giving an eminently rational appreciation of its advantages, as well as showing the possibility of its abuse.

University Intelligence.

MELBOURNE UNIVERSITY.

At the meeting of the Council on the 7th inst., the Chancellor submitted the draft of a petition to the Queen, asking that medical graduates of the University might, under Part II. of the Medical Act 1886, be entitled to registration as legally qualified medical practitioners in the United Kingdom. The draft was adopted.

Ten applications—six from England and four from the colonies—were received for the position of Demonstrator and Assistant Lecturer in Biology. It is decided to refer the testimonials of the candidates to a committee, consisting of the Chancellor, the Vice-Chancellor, Dr. Bromby, Dr. Bride, and Mr. Macfarland, for report.

Professor Allen wrote requesting that the sum of £250, voted to him on the 28th February last, in connection with his work as Demonstrator of Morbid Anatomy, might be made available. On the motion of Professor Irving, it was resolved to inform Professor Allen that the money was available and had been available ever since the resolution of the 16th May, refusing to recognise the claim made by Professor Allen, was adopted by the Council.

Dr. Bird wrote, stating that he did not desire to be re-elected as Lecturer in Medicine, owing to pressure of private work; at the same time expressing great regret at the severance of his official connection with the University, after a period of 18 years' service. Dr. Jamieson also wrote, stating that, as he wished to devote himself more exclusively to general medicine, he did not intend to apply for re-election to the position of Lecturer on Obstetrics. On the motion of Dr. Morrison, the Council expressed regret at the resignation of both gentlemen, and also their high appreciation of the efficient way in which they had during so many years uniformly discharged their duties.

A letter was received from the committee of the Alfred Hospital, in regard to the giving of separate hospital practice and clinical lectures to female medical students, as follows:—"In reply to your letter of the 11th October, conveying a resolution of the University Council, and your subsequent letter of the 19th October, I have now the honour, by direction of tne Board of Managers, to inform you that while not opposed to giving instruction to female students at the clinical school now established at this institution, they are of opinion that until there is reason to believe that such students will permanently attend in considerable numbers, it is not thought desirable to formally reserve the advantages of the hospital for them alone."

By way of reply, the following motion was adopted:—"That the authorities of the Alfred Hospital be communicated with, so as to ascertain whether they will make arrangements, for the year 1888, for the giving of separate hospital practice in surgery, in the out-patient and casualty departments, with instruction in minor surgery and in the application of surgical apparatus, to the lady medical students of the University."

At the meeting of the Council on the 14th inst., Mr. Arthur Dendy, B. Sc., was appointed Demonstrator and Assistant Lecturer in Biology, the final voting being between him and Mr. Fenton, Chief Demonstrator of Biology at Cambridge University. Mr. Dendy was a student in Owen's College, Manchester, and graduated at the Victoria University. He has worked not only under Professor Milnes Marshall, but also under Professors Flower and Gunther, at the British Museum.

Mr. R. Murray Smith is the only candidate nominated for election to the vacancy in the Council, caused by the resignation of Dr. Mackay.

The ordinary examination for degrees in Medicine, commenced on the 14th inst.

Hospital Intelligence.

ALFRED HOSPITAL.

The question of the admission of female medical students is still under discussion. At the meeting of the Committee on the 11th inst., a letter was received from the University Council, asking that arrangements might be made for the year 1888 for the giving of separate hospital practice in surgery in the out-patient and casualty departments, with instruction in minor surgery, and in the application of surgical apparatus to the lady medical students of the University. The letter was referred to the hon. medical staff for their report.

WOMEN'S HOSPITAL.

The consideration of the condition of the infirmary portion of the Hospital was brought before the Committee on the 14th ult. by a letter from Dr. Rowan, pointing out that the patients have often to be sent out too soon after operations, owing to insufficient accommodation. He also pointed out that some of the wards are in a very defective condition. There was received at the same time a report from the medical staff, in which it was stated that the Infirmary is greatly overcrowded, and that additional accommodation is urgently needed.

At the meeting on the 21st ult., a discussion arose in connection with these reports, and ultimately the following was adopted on the motion of Dr. Jamieson :—"That a sub-committee, consisting of the members of the hon. medical staff and three members of the house committee, be appointed to inspect the Infirmary department, with the view of adapting the number of beds to the space in each ward, and to make such alterations as will render their sanitary condition as good as possible until permanent improvements can be made by extension or re-building."

The new buildings for the maternity department are now approaching completion, but definite arrangements have not been made for the election of the additional honorary medical officers, the questions as to qualifications, &c., not having yet come finally before the subscribers. It is likely that there will be a large number of applications for the new positions, though the election can hardly take place before February or March.

It is proposed to make provision in the new rules for the Lecturer on Obstetrics at the University being *ex officio* a member of the medical staff attached to the maternity department, a proposal which we think will have the sympathy of the profession.

Vital Statistics.

The report of the Government Statist on the Vital Statistics of Melbourne and Suburbs, for September 1887, shows that the births of 1301 children, viz., 675 boys, and 626 girls, were registered during the month. The deaths registered, numbered 553, viz., 323 of males, and 230 of females. To every 1000 of the population of the district, the proportion of births registered was 3·50, and of deaths 1·49. One hundred and twenty-two deaths occurred in public institutions. The number of children under one year who died was 112, the total number under five years being 156.

In September, as compared with the previous month, deaths from specific febrile or zymotic diseases decreased from 60 to 34, and those from local diseases from 363 to 292. Under the zymotic head, deaths from measles fell from 14 to 4, those from whooping-cough from 4 to 1, those from typhoid fever from 9 to 7, and those from diarrhœal diseases from 11 to 7. Under the local head, deaths from brain and nerve disorders fell from 77 to 69, those from heart affections from 59 to 47, those from lung and chest complaints from 129 to 97, and those from bowel and stomach diseases from 53 to 38. Eight deaths of child-bearing women occurred during the month, as against 4 in August. If these numbers be compared with the births registered during the same months, it will follow that 1 death of a mother took place to every 163 children born alive in the month under notice, and 1 to every 358 such children in the previous month.

Correspondence.

To the Editor of the Australian Medical Journal.

Sir.—Could you kindly, for the sake of Australian priority, refer, in the next number of the *Medical Journal*, to my having excluded from phytology (in my " Key to the System of Victorian Plants ") all those organographic expressions, which are used in the anatomy of the human body and thence in zoology. You might instance that the fibro-vascular tract in leaves is called by me uniformly "venules," instead of "ribs, nerves and veins," as hitherto designated according to calibre and course, such adjectives as carinular, costular, anastomosing, &c., rendering the simple use of the word venules clear in every respect and quite logical. In veins of the higher vertebrata and man, the venæ cavæ, azygos, portæ, &c., are quite responding to what is called midribs in plants, as regards size and firmness. Ovarium has become in my new work ovularium, albumen—albumentum (an ancient classic word), placenta—placentarium, after De Candolle's early writings, though abandoned by himself. Hairs of animals are chemically and often also structurally different to those of plants, and are therefore called by me throughout "hairlets," so bristles—bristlets. The term "fruitlets," for the carpids (not well called carpels), was constructed by me before. "Headlets" of flowers is in accordance with capitulum, not caput, and is consonant also to expressions used for flower-heads in the French, the German, the Italian, and the Spanish languages. Such terms as "beaks, horns, tails, mouth, lips, wings, palate, claw, &c." which came down to us from mediæval and even ancient writers on plants, have been entirely banished from the phraseology of the "Key." What may be lost in brevity, is amply compensated for in lucidity, I trust.—Yours, &c.

F. VON MUELLER.

[In a letter received from Baron von Mueller at the same time as the above, he informed us that he had received notice from Dr. Mortiz Herdegen, of Albury, that he had found in a patient suffering from diarrhœa and anæmia, both ova and adult specimens of *Anchlyostoma Duodenale.* Unfortunately, Dr. Herdegen's specimens had been mislaid during his absence from home, so that he could not forward them for verification. As this is the first occasion on which this parasite has been reported as existing in Australia, we have no doubt that Dr. Herdegen will see the desirability of obtaining fresh specimens, if possible, and submitting them for examination, that a discovery of such importance in practical medicine may be placed beyond all doubt.—ED.]

Local Subjects.

Medical Board of Victoria.—The following gentlemen have registered their qualifications:—Natale Sisca, Melbourne, M.D. Naples 1885; William Boyle Norcott, Melbourne, M.R.C.S. Eng. 1848; John William O'Brien, Melbourne, M.B. et Ch. B. and Qual. State Med. Dub. 1886, L. 1886, F. 1887, R.C.S. Irel.; Alexander Wellesley Finch Noyes, Deniliquin, N.S.W., M.R.C.S. Eng. 1886, L.R.C.P. Lond. 1886, L.S.A. Lond. 1885; Shirley Roberts, Avoca, M.R.C.S. Eng. 1887, L. et L. Mid. K.Q.C.P. Irel. 1887; Joseph Gillis Wynne, Colac, L.A.H. Dubl. 1883, L. et L. Mid. R.C.P. et R.C.S. Edin. 1884, Harold Knowles Bean, Melbourne, M.B. Edin. 1880; Walter Herbert Barker, South Yarra, M.R.C.S. Eng. 1875, L. et L. Mid. R.C.P. Edin. 1880; Malcolm Webb, Melbourne, M.D. Lond. 1884, M.R.C.S. Eng. 1882; Harvey Eustace Astles, Melbourne, F.R.C.P. Edin. 1879, M.D. St. And. 1883, M.D. Adelaide 1885 (*a.e.g.*); Charles Gower Lermitte, Melbourne, M.R.C.S. Eng. 1885, L.S.A. Lond. 1885. Additional qualifications registered:—No. 1030, Samuel Connor, Coleraine, M.D. et Ch. B. Melb. 1887 (*a.e.g.*); No. 1334, William Kilpatrick, Yarra Flats, Ch. B. Melb. 1887. Names of deceased medical practitioners ordered to be erased from the Register:—No. 985, Samuel O. Higgins, M.B. Melb, &c.; No. 327, William Jones, M.R.C.S. Eng., &c.; No. 61, Henry D. Croker, M.R.C.S Eng.; No. 43, Solomon Iffla, L.F.P.S.

Public Vaccinators.—The following appointments have been made:—Dimboola—Tudor Hora, M.R.C.S.E., *vice* J. A. Hayden, M.R.C.S.E., resigned; Healesville—Bernard Stevenson, L.R.C.S. Edin., *vice* John Gray, M.R.C.S.E., resigned; Sunbury—Thomas Hodgson, M.B., *vice* Solomon Iffla, L.F.P.S. Glas., deceased; Wahgunyah and Rutherglen—William Henry Lang, M.B. et Ch. M., *vice* Thomas Loughrey, M.B. et Ch. B., removed from office; Colac—Max Wall, M.D., *vice* Thomas Foster, M.R.C.S., resigned; Minyip—Andrew Grant, M.B., *vice* H. A. H. Schiel, M.D., resigned; Myrtleford—Abraham Haynes, L.R.C.S., *vice* R. Cullinan, L.F.P.S., resigned; Apollo Bay and Irrewillipe—Joseph Gillis Wynne, L.R.C.S., *vice* C. F. Porter, M.R.C.S., resigned; Birregurra—George Marr Reid, M.B., *vice* C. F. Porter, M.R.C.S., resigned; Yarra Flats—William Kilpatrick, M.B.; Yelta—Henry Breton, M.D.; Kyneton—Robert Byron Duncan, F.R.C.S., during the absence on leave of William Langford, M.R.C.S.; Moonambel and Redbank—Shirley Roberts, M.R.C.S.; Mount Egerton—Natale Sisca, M.D., during the absence through illness of William Sinclair Dobbin, M.B.

Health Officers.—The following appointments have been confirmed:—Shire of Dunmunkle, North Riding—Andrew Grant, M.B., *vice* Hugo A. H. Schiel, M.D., resigned; Shire of Dimboola—Tudor Hora, L.F.P.S., *vice* James A Hayden, M.R.C.S., resigned; Borough of Clunes—Arthur Henry Gordon, L.R.C.P., *vice* Montagu W. C. Perceval, M.R.C.P., resigned; Shire of Ballarat—Edwin John Gurdon, L.R.C.P., *vice* Montagu W. C. Perceval, M.R.C.P., left the district; Shire of St. Arnaud, Minyip division of the West Riding—Andrew Grant, M.B., *vice* Hugo H. A. Schiel, M.D., resigned; Shire of Ripon, East Riding—George James Scantlebury, L.R.C.P., *vice* Robert Stewart, L.R.C.P., deceased; City of Collingwood—John Hoysted Courtenay, L.R.C.P., *vice* James R. M'Inerney, L.K.Q.C.P., resigned.

In consequence of the death of Dr. Iffla, Dr. George Graham has been appointed Official Visitor to the lunatic asylums at Melbourne and Sunbury. Dr. W. H. Campbell has also been appointed Visitor to the Sunbury Asylum.

Dr. James B. Hayes, of Smythesdale, and Dr. Arthur H. Gordon, of Clunes, have been appointed Certifying Medical Practitioners, under "The Factories and Shops Act," for the district of Ballarat and Geelong. Dr. Henry B. Clark, of Heathcote, has also been appointed for the district of Castlemaine and Sandhurst.

Dr. George Le Fevre has been elected by a large majority to a seat in the Legislative Council for the North Yarra Province. We have to congratulate Dr. Le Fevre on his election, and the profession has also room for congratulation, in that there is now a better prospect of its interests being fairly and legitimately represented in Parliament.

The course of lectures under the auspices of the Australian Health Society has now been concluded, the last subjects having been: "The True Relation of Typhoid Fever to Drains," by Dr. M. Barclay Thomson; "Spectacles," by Dr. J. W. Barrett; "Healthy Homes," by Dr. J. W. Springthorpe; "The Foot and Its Covering," by Dr. J. E. Neild; and "The Singing Voice," by Dr. Iredell. The whole of the lectures have been well attended.

Professor Watson, of Adelaide, during a recent visit to Melbourne, explained to a meeting of gentlemen interested in pastoral pursuits, his method of exterminating rabbits by inoculating them with rabbit scab. It was resolved to raise a sum of money for the purpose of carrying out a proper series of experiments, the intention being to run infected rabbits and other stock together in an inclosure for the purpose of discovering with certainty, whether the disease will extend from the rabbits to other animals. The Government is to be asked for permission to make the experiments, the promoters of the scheme being held free from liability for any injury which may result from the introduction of this new disease into the Colony.

At the meeting of the Royal Society of Victoria on the 10th inst., a paper was read by Professor W. Baldwin Spencer, on "The Structure and Classificatory Position of the Megascolides Australis." The paper which was only a preliminary one, is to be followed by an elaborate monograph, giving the results of Prof. Spencer's observations on the great earthworm, which is found in Gippsland, and which has not hitherto been fully described. A paper was also read by Dr. Jamieson, giving the details of a series of experiments made for the purpose of determining the range of action of some of the digestive ferments, and chiefly the influence exerted by hydrochloric acid in various degrees of dilution, on the action of the pancreatic ferments as found in the preparation known as zymine. The general result was that hydrochloric acid even in the strength of 1 part in 5000 has a marked effect in checking the action of both the tryptic and amylolytic ferments; and that in the strength of 1 to 1000 of the acid, the ferments, after two hours at 95° F., are found to be permanently injured. The experiments went also to show that, while zymine is not attacked by pepsin, the former has a destructive action on the latter, in solutions made slightly alkaline with bicarbonate of soda.

The Society is to hold its Annual Conversazione, at the Athenæum, early in December.

Messrs. Burroughs, Wellcome and Co. desire to have it intimated that they have removed their office to the basement of the new buildings of the Australian Widows' Fund Society, where stocks of their preparations will be kept. Specimens of these will be sent to members of the profession on application. The new address is 117 Collins Street West, Melbourne.

Central Board of Health.—At the meeting of the Board on the 21st ult., it was resolved to relax the quarantine precautions taken with regard to vessels coming from Launceston, if no fresh cases should occur by the 28th.

The question of the complaints made about the bad quality of calf-lymph supplied, was considered: Dr. Porter having published letters from medical men, stating that it contained blood and other impurities. It was stated by the President that there had been difficulties in the cultivation and collection of the lymph, but that the work was now satisfactorily done by Drs. Le Fevre and Brett, with the assistance of Mr. Kendall as veterinary surgeon. Dr. Le Fevre forwarded his resignation of his position of public vaccinator, in consequence of his being a candidate for Parliamentary honours. The resignation was accepted, and Dr. Brett was temporarily appointed public vaccinator in place of Dr. Le Fevre.

At a meeting on the 28th ult., it was reported that Dr. Figg had resumed duty as health officer at Williamstown, and that as a fresh outbreak of small-pox had occurred in Tasmania, the quarantine restrictions would be kept up.

In reference to the examination of mail steamers at the Heads, on arrival from any cholera-affected ports, it was resolved that the Board should insist upon all such vessels being detained for examination by the medical officer of the board, unless there was produced a clean bill of health, as the result of examination at Adelaide by a properly qualified medical officer.

It was decided that the Chief Secretary be asked to have inserted in the Amending Public Health Bill, a clause which would give the board power, with the consent of the Governor in Council, to make regulations for the disinfecting of rags used in the manufacture of cloth.

At the meeting on the 11th inst., it was reported that, though no new cases of small-pox had occurred in Tasmania since the 27th ult., quarantine precautions could not be relaxed till fifteen clear days had elapsed. With reference to the outbreak as a whole, it appears that there have been thirty-one cases, and that of these no fewer than eleven have proved fatal.

Applications were received from several medical men for the position of public vaccinator with the duty of superintending the cultivation of calf-lymph, but in the absence of Dr. Shields no action was taken with reference to them.

The question of supplying calf-lymph to the other colonies was raised, and it was suggested that though supplies had hitherto been sent gratuitously, it would be fair that part of the expense should be borne by those who received it in considerable quantity. Victoria it appears is now the only colony in which the cultivation is successfully carried on.

A long report on the overcrowding of lunatic aylums was received from Mr. Le Capelaine, and ordered to be forwarded to the Chief Secretary previous to publication.

BIRTHS.

Cuseaden.—On the 13th August, at Urana, N.S.W., the wife of Dr. Geo. Cuseaden, of a son.

Fox.—On the 27th ult., at Harrow, Victoria, the wife of Dr. Fox, of a son.

Lethbridge.—On the 26th ult., at "The Mount," Alexandra, the wife of C. F. Lethbridge, M.R.C.S.E., of a daughter.

Macgibbon.—At Como, Brunswick-street, Fitzroy, on the 27th September, the wife of Walter Macgibbon, M.D., of a daughter.

Maclean.—On the 31st ult., at Cecil-street, Williamstown, the wife of Dr. H. R. Maclean, of a son.

Mitchell.—On the 25th ult., at Narandera, N.S.W., the wife of Dr. Mitchell, of a daughter.

Verity.—On the 17th ult., at Marlow Villa, Charman-road, Cheltenham, the wife of Herbert W. Steele Verity, surgeon, of a daughter.

Weld.—On the 20th ult., at her residence, Scott-street, Warracknabeal, the wife of Dr. Weld, late of Ararat, of a daughter.

MARRIAGES.

Backhouse—Ashley.—On the 5th ult., at Holy Trinity Church, Balaclava, by the Rev. Dr. Torrance, M.A., John Burder Backhouse, M.B., of Brighton, to Emily, only daughter of Edmund Ashley, Esq., J.P., St. Kilda.

Crivelli—Duret.—On the 4th ult., at St. Mary's Church, Dandenong-road, St. Kilda, by the Right Rev. Dr. Corbett, Bishop of Sale, Marcel Crivelli, M.D., to Charlotte, second daughter of Dr. Duret, Albert-park.

Lempriere—Bell.—On the 31st August, at St. George's Church, Hanover Square, London, Dr. Charles M. D'Almeida Lempriere, to Mary Constance, youngest daughter of Hesketh D. Bell, of Eastcote, Bayswater.

Morgan—Hepburn.—On the 19th ult., Dr. W. C. Morgan, of Bairnsdale, to Sissie, only daughter of Robert Hepburn, of East Melbourne.

Seelenmeyer—Munster.—On the 1st ult., at Clondara, Alma-road, St. Kilda, Adolph F. Seelenmeyer, M.D., of 109 Collins-street East, to Alexandra Mary, elder daughter of E. F. Munster, of Quanderg, Urana, N.S.W.

Willis—Bleackley.—On the 19th ult., at Christ Church, Daylesford, T. R. H. Willis, M.B., Ch. B., to Mary W. Bleackley.

Contributors of Papers to the *Australian Medical Journal* can have a few copies re-printed in Pamphlet form by communicating with the Publishers before the issue of the *Journal*.

THE
Australian Medical Journal
DECEMBER 15, 1887.

Original Articles.

INTRA-PELVIC ARTICULAR ABSCESS.

By John H. Webb.

The exhaustive paper read by Mr. Fred. Bird before the Medical Society of Victoria, at its June meeting, leaves little unsaid respecting the early stages of sacro-iliac disease. It will be recollected that the writer dwelt at length on the assigned causes of this malady, that he detailed the various indications by which it might be recognised, and mentioned the lines of treatment he should, in fact, did, adopt in cases that had recently come under his care. From his reading and experience he gave a hopeful prognosis when early recognition was possible.

Unfortunately, however elaborately we may figure out to ourselves signs and symptoms as they ought to appear, we really seldom meet with sacral joint disease until abscess has formed, and is pointing in front of the abdomen, or on the inner side of the thigh. The four instances which received Dr. Bird's attention occurred within a brief space of time, and were all cases of simple osteitis, the outcome of external violence. On the other hand, the majority of the instances that have come under my own observation have been the sequela of parturition, and I cannot call to mind any case in which the disease followed a blow, or external injury. So much for individual experience. It seems impossible to ascertain from any source what really is the frequency of this affection. Some authors mix up caries of the ilium with this malady, others write of it as arising from bedsores, or from sarcoma; well, certainly from these causes the joint may be opened into, and suppuration induced, but that is not exactly what is meant when we speak of sacro-iliac disease. We should never call sloughing into the knee, from the too tight constriction of a fractured patella, disease of the knee-joint. When sacro-iliac disease is mentioned, I apprehend we mean one of three affections, which are indeed only phases of a single disorder. First, simple osteitis, such as all bones are liable to after injury; secondly, osteitis interna fungosa, osteo-myelitis granulosa, rarefying, dry caries; and thirdly, osteitis with caseous degeneration and suppuration—scrofulous, strumous. All bones are liable to inflammation, that goes without saying, but are all cancellated bone masses subject to dry caries? I am under the impression that we seldom meet with this form of molecular absorption except where the osteitis is maintained by some undue pressure, as in caries of the dorsal vertebræ by the weight of the superincumbent head and shoulders, or in hip disease by the spasm of irritated muscles. Hence the value of extension and tenotomy.

Now the sacro-iliac synchondrosis is a joint which, though in a certain measure subject to pressure, unlike a vertebra, has its fellow, in the event of any inflammatory softening taking place, to relieve it of its painful burden. Its constituent parts can never be affected by irregular muscular contraction. Further, it is an articulation which, being unbacked by powerful stays, such as ligaments and osseous facets, on the slightest absorption or softening of its cartilaginous cushion, is extremely liable to shift, and, as far as the external fibrous attachments will allow, to partially dislocate into an easier position. As regards the other variety of caries, osteitis with suppuration, this is, I fancy, a very rare affection, at all events, in Australia. For the last fifteen years I have been constantly on the look out for sacro-iliac affections, and I think I must have seen a fair proportion of the pelvic abscesses and sinuses that have occurred in and around this city. Yet I have only met with two instances in which the suppuration could be traced to this joint, and at the same time assigned to this form of osteitis. Frequently I have thought that such and such a sinus was thus connected, but a post-mortem examination, or some fresh development, has revealed the error of my opinion. As a matter of fact, unless a boss, or some irregularity in the osseous structure is present, the diagnosis of caries in any part of the vertebral column, or the sacral wedge, must be more or less a subject of conjecture. Even in the dead-house, with the parts freely exposed, and the seat of caries strongly suspected, there may be, as I purpose to instance, the greatest difficulty in fixing the origin of an intra-pelvic articular abscess. The cases then in which premonitory symptoms can give a note of warning must be very few, and confined almost wholly to those that arise from an external injury. Where the disease follows wrenches received during labour, is due to morbid deposits, pyæmia, struma, and so forth, suppuration is one of the earliest indications, so that, with rare exceptions, however fanciful and pleasant it may be to depict the signs that should herald the commencement of sacro-iliac disease, practically when considering this malady we are called on to face intra-pelvic abscess and sinus, and the miseries that attend them.

Until quite recently, everything connected with this sacral joint was considered almost outside the pale of the surgical art. The only treatment these pus accumulations received was an opening, strictly enjoined to be valvular; or they were emptied with an aspirator and allowed to re-fill, re-emptied and so forth till the end of the chapter, until both the surgeon's and the invalid's patience were completely exhausted. Then came Listerism, and to this system we owe a great deal. By its means several of these abscesses were brought to a happy issue, but the failures were also many. I have never seen an abscess that pointed above Poupart's ligament get well under this treatment alone, and the reasons are apparent. There are evidently two hindrances that prevent the healing of an intra-pelvic abscess when such a lesion is left to take its own course, or simply dealt with by antiseptics. The one is *imprisonment of bone,* the other, *the want of dependent drainage.* As regards the former, no one who has examined museum specimens, or made autopsies in instances where death has resulted from spinal caries, can fail to be struck with the frequency of this cause. The history of a spinal disorder is simple, but I am afraid I must reiterate a little. A morbid deposition takes place, or a simple osteitis occurs in the cancellated structure of a vertebral body, or it may be, and this I think myself is often the starting point, a softening or a disintegration of an inter-vertebral disc commences. I am fully aware that such pathology is very heterodox, that such an inert non-vascular substance as fibro-cartilage can become the seat of active inflammation is directly contrary to received opinions, but how in any other way can the entire absorption and disappearance of a whole disc, whilst the vertebræ remain sound and untouched, be satisfactorily accounted for. The writer had for some time in his possession a specimen of vertebral disease, in which all that remained of the disc between the last dorsal and first lumbar vertebræ, was a little pulpy, caseous dèbris, whilst the bodies of the adjacent bones were perfectly sound; not even roughened. Ankylosis had occurred between the articular facets and the spinous processes, so that the vertebræ had not as usual, fallen together. Behind there was an entire absence of curvature, and a considerable cavity existed in the place the inter-vertebral substance formerly occupied. The patient, who was under the care of the late Dr. Motherwell, died, I believe, from renal disease, and the spinal trouble totally unsuspected during life, was only accidentally discovered by the pathologist in the post-mortem room of the Melbourne Hospital. However this may be, whether the disease starts from the bone, or whether the bone is secondarily affected by inflammatory extension, or simply by the pressing of the softened structures upon one another, breaking up of the fibro-cartilaginous discs generally occurs at an early stage. Pus is formed, followed by rupture of the capsular ligaments, or to be more exact, the ligaments surrounding and holding the vertebral segments together. Now if the opening happens to be sufficiently large, the dead bone, which separates after being denuded of its cartilage, escapes together with the matter into the sheath of the nearest muscle, and thus gradually makes its way to the surface. But when pus presses its way through elastic tissue, it usually makes only the smallest of rents, just enough to allow the inter-vertebral dèbris, the white creamy caseous stuff, that all who have at any time evacuated one of these intra-pelvic collections know so well, and the smaller osseous granules from the cancellated structure, to pass. When the layers of compact bone, to which the discs are attached, break up, they are liable to exfoliate in pieces often too large to escape through the opening by which the pus has already freed itself. The result is that these shells or scales of dead bone remain imprisoned to form pus-creating centres, and no permanent improvement can be expected to take place in the condition of the patient till they are released from their confinement. Unhappily when this encagement has once taken place, liberation is seldom effected by nature itself. Under antiseptics the tendency is rather the other way, for as soon as the integument has been perforated and the pus cavity evacuated, the parts settle themselves down to the formation of a narrow sinus, and to the contraction and cicatrization of the soft tissues at the seat of lesion. I well remember attending a post-mortem at the Melbourne Hospital, on the body of a girl who had lingered away *with*, though not exactly *from*, double psoas sinus. Strict Listerism had just at that time been introduced into the hospital, and the patient had in the most careful manner all along been subjected to this treatment. The opening into the capsular ligament at the seat of lesion would barely admit the end of a bullet probe, whilst in the interspace formed by the disintegration of the inter-vertebral disc, lay two or three loose scales of bone. At the origin of the sinuses, the old abscess sacs had completely healed, the successful cicatrization being no doubt the result of the antiseptics employed. The parts had become so contracted, and the suppuration so reduced, that unless a casual stoppage of the sinus, and a damming back of the discharge had occurred, one cannot conceive how these chips of bone could ever have effected their escape. As with spinal caries so with sacro-iliac disease. During Mr. James's holiday last year, I took charge of his beds in the hospital. In one of them was a case that the doctor had pronounced to be sacro-iliac caries, from a wrench received during parturition, some six weeks previous. Almost before I could examine the case, the woman died. In the presence of Drs. Moore and Howard, a post-mortem examination was made. When the viscera were cleared away, we searched the inside of the pelvis to find out whence the pus proceeded, which joint was affected. Both synchondroses being apparently the same, neither in the least bare or roughened, we turned the body on to its face, and stripped the skin off the sacrum and beyond; we then noticed a difference between the two sides, the characteristic shifting of the innominate towards the middle line, and upwards—an undue approximation of the posterior superior spine of the ilium to the rudimentary spinous processes of the sacrum. Having removed the pelvis in its entirety from the body, we carefully examined the joint, which, from this indication, was evidently the one affected. We discovered an opening in the internal sacro-iliac ligament, so minute as barely to admit the end of a dissecting case blow pipe. It was then seen that by pressing the ilium and sacrum together, a drop of pus could easily be made to exude through this aperture. On dividing the ligament and exposing the interior of the articulation, we noticed that the inter-articular cartilage had absolutely disappeared, and that the space between the bones contained some reddish gelatinous stuff, fragments of fibrous tissue, osseous granules and two scales of bone, one nearly as large as a threepenny piece. The absorption of the cartilage easily accounted for the partial dislocation, and post-mortem increased mobility of the joint. But one was surprised to find that simply from imprisonment of the bone such violent suppuration had occurred, that scarcely six weeks could have intervened between the patient's confinement and her death. I could furnish one or two more instances in which I have noticed a similar pathological condition, but space will not permit, still I should like to allude to one other, to a case that at the time was known to every leading practitioner in Melbourne. Here for six years the whole of the mischief—the suppuration—was kept up by this imprisonment of bone. The lady was under my care during the greater part of her illness, and for a long time by rest and the employment of strict antisepticism, I was fortunate enough to induce the osseous fragments to remain quiescent; at length something, probably the accidental blocking of the sinus, again disturbed this wretched scale of bone, and it contrived to gnaw its way through the intra ilio-sacral ligament, then breaking into two pieces, one formed a new abscess and escaped through the skin, just above the crest of the ilium in front, the other worked its way into the colon, and thus occasioned a fæcal fistula, communicating with the back. From this complication my unfortunate patient ultimately died. One cannot help reflecting how easily now with our present knowledge, this life could have been rescued.

Next as to drainage, but first let me remark, that the course an intra-pelvic articular abscess takes, and the region at which it will present, depends wholly on gravitation, in other words, on the decubitus of the patient. If the position generally assumed is on the back, the matter will probably travel along the sheath of the iliacus, and point in the groin above Poupart's ligament. If however, the the seat of irritation be at the sacro-iliac synchondrosis, the patient usually finds lying on the sound side, over on to the abdomen, almost in Sims' position for uterine examination, the most comfortable. In such a case, the pus after bulging, first just above the crest of the ilium, passes downward in front of the sacrum, often between the periosteum and the bone, then works its way into the track of the vessels, on the dependent or unaffected side, and following their course, presents below Poupart's ligament usually on the inner side of the thigh. And this is rather an important consideration. One I believe that has hitherto been overlooked. It is of consequence, for in some cases where rapid suppuration has followed parturition, without a remembrance of the course pus travels it is perfectly possible, in draining from the back, to operate on the wrong side.

There are two methods of draining an intra-pelvic abscess, first, by trephining through the sacro-iliac synchondrosis, and second, by an incision from the back. In 1878 I attempted the former plan, and was so far successful, that I managed to enter the abscess sac, but the parents of the lad I was attending were such unintelligent and drunken people, that it was impossible to continue the treatment of the case in private, and I was at last reluctantly compelled to abandon the child. The family moving away, I have never been able to learn what befell the boy, but I am convinced that under happier circumstances, I should have been able to have brought this case to a fortunate issue. I trephined into the synchondrosis again about two years ago, when doing duty for Mr. James in the Melbourne Hospital. In this instance I missed the sinus, for the abscess had burst externally above Poupart's ligament some time previous. I do not think the operation shortened the man's life, but after death, as showing how easily the seat of disease may be mistaken, I found that the articulation between the last lumbar vertebra and the sacral bone was really the joint involved, and that the synchondrosis I had perforated was perfectly healthy. To my mind this surgical proceeding, trephining through the ilium into the sacral articulation, though it may be justifiable in some cases, is not exactly a satisfactory operation. I question if I shall ever do it again, and yet to recommend it, it possesses two advantages. First, it most effectually drains the articulation abscess, or sinus; and next if the bone is skilfully removed, there is no necessity to divide the internal sacro-iliac ligament. On the other hand, the operation certainly is a severe one, it entails a large and deep incision in a patient already probably exhausted by want of sleep, pain, &c., and it may be accompanied with considerable, though I must say controllable hæmorrhage. Besides this, one can never be quite sure in cases of iliac sinus, that the sacral articulation is the one affected. The ilium may not have slipped up, and without that sign I am not aware that we possess any other certain indication. There is another plan by which an intra-pelvic abscess may be effectually drained, and that is through an incision in the back, through the erector spinæ and the quadratus lumborum muscles. Until a few days ago, I was quite unaware that anybody besides myself had advocated this procedure, but I see that Mr. Golding Bird, in his article on Abscess in Heath's Dictionary of Surgery, has not only practised, but strongly recommends this operation, I first performed it on a little boy in the Melbourne Hospital quite three years ago, but the poor lad in spite of the splendid drainage procured, dwindled away, though without hectic, just the same as if only an opening in front had been made. I was very much disappointed at the loss of this lad, and the more so, as without a post-mortem examination, his death, at the time, seemed so inexplicable. However, I am under the impression now that it must have been due to some retention of fragments between the bones entering into the synchondrosis. The operation as described by Mr. Golding Bird, is exactly the one I performed, but as I shall show, it has one great defect—"It entails a stab in the dark." In consequence of this I decided, if another occasion offered, to simplify the procedure. Of course, one does'nt meet with iliac abscesses every day, and not having a hospital appointment, some time elapsed, quite a year, before another opportunity fell in my way. This happened in a case that Dr. Graham, of Richmond, asked me to see with him. With my unlucky experience before me, I dubiously opened the abscess in front. The lad of course grew worse; a fortnight afterwards I entered the sinus from the loin, and at the same time split the internal sacro-iliac ligament. Since this, the case has made uninterrupted progress, and is now all but well.

I opened into an iliac sinus again about a month ago, in a case of sacro-coccygeal disease. On this lad, no expense or trouble had been spared in the maintenance of the strictest antisepticism, yet in spite of all care he has been going steadily to the bad for the last three or four months. The dependent opening has, I hear, afforded immense relief, and what is more to the purpose, the patient is putting on weight. Still, I doubt if recovery can take place till the sacro-coccygeal ligaments are split. The operation for entering the pelvis from the loin, as performed by Mr. Golding Bird, is thus described by him:—"The patient being in the colotomy position, a vertical incision four inches long is made at the edge of the erector spinæ, its centre being in the adult two inches above, and in the same line as the posterior superior iliac spine. Everything is divided till the quadratus lumborum is reached, this is then incised to the extent of two inches in the same direction. On reaching the anterior surface of this muscle the sub-peritoneal fat is seen—a sure guide. The finger now thrust into the wound in the direction of the base of the sacrum, feels a fluctuating tumour, especially if an assistant makes counter pressure on the abscess in front. Where fluctuation is most distinct, the abscess is now incised." This is identical with the expedient I carried out in 1884, except that there is no occasion to make the incision longer than an inch, but I came to the opinion that it was rather a hazardous affair. That "stab at the end of the finger" is certainly not made with any degree of comfort to the operator. I remember I felt at the time as if my luck only had pulled me through. Anyhow, since then I have practised a simpler proceeding which seems to succeed just as well. The incision in the back is made the same as the one just described, only smaller, which completed, a free opening is effected in front, and the contents of the abscess allowed to flow out. Next a bullet probe, curved to a half circle, and its point slightly bent in the opposite direction, is allowed to gently fall along the course of the abscess, that is round the iliacus muscle. With a little coaxing it can be made to emerge, or at least to present, at the incision in the back, and with a touch of a bistoury the opening is easily enlarged to admit the forefinger. Following the probe, the sacro-iliac joint can now easily be felt, examined, and any loose dead bone removed, though I must confess I have never been able to detect any detached pieces myself; also, if considered necessary, with the forefinger on the articulation and a long probe pointed tenotome, the upper portion of the sacro-iliac ligament can be severed without incurring the risk of wounding either vessels or nerves. It is my opinion that this should be done whenever it is thought that the synchondrosis is involved. I have already alluded to a case which I am convinced died through my neglecting to divide the ligament, and I am equally certain that I could point out two or three others where the same result has occurred from a like cause. The opening in the back should be tubed for a few days with a wide but short piece of tubing, which should be occasionally withdrawn and the wound syringed out and probed. This is done to allow the scales of bone to escape. As regards the opening in front, on the whole it is best I think to incise freely, for the integument of the abdomen is more or less separated by the pus from the muscles on which it lies, and is consequently poorly nourished. If only pricked enough to admit the guiding probe, it is sure to slough and leave awkward "bridges of skin"; there is therefore nothing to gain by a sparing use of the knife in front.

Another plan of entering the pelvis is through the ischiatic notch. I cannot say I have as yet performed this operation myself, though I have it strongly in my mind to do so in a few days. The patient over whom I am hesitating is affected with caries of the third section of the sacrum, at least the external protuberances indicate as much, and this is the second infection. He has a gluteal sinus on the left, and an iliac on the right side. I have already opened from behind, but failed to reach the seat of disease, probably on account of the intervention of the pyriformis, which appears to me to form a septum between the wound in the loin and the origin of the iliac sinus, at all events, something prevents effectual drainage being carried on through the back. The way I propose to operate is to cut down through the gluteal muscles on to the artery underneath as it passes out below the pyriformis, and then with the fore-finger follow along its tract, which course is the one I think the pus must have already travelled.

To summarise—As with spinal caries, so with sacro-iliac disease. It can never be positively asserted that either malady exists, unless curvature or luxation can be detected, thus pain, tenderness, lameness, &c., are but "suspicious symptoms:" indications not sufficiently strong by themselves to allow an aggressive treatment to be entered upon. In sacro-iliac disease, partial luxation is generally an early sign. It arises in consequence of the softening and disintegration of the inter-articular cartilage permitting relaxation of the ligaments in connection with the joint. The course the pus will pursue depends upon the customary decubitus of the patient. While intra-pelvic abscesses pointing below Poupart's ligament may be opened in a convenient position by subcutaneous incision in the thigh, abscesses bulging in the abdominal walls should always be evacuated at once from behind. Intra-pelvic abscesses should never be aspirated; such treatment only causes delay and further separation of the tissues. In all cases of sacro-iliac disease, the joint should either be trephined, or the superior portion of the internal sacro-iliac ligament divided.

169 Collins Street East.

A CASE OF OVARIOTOMY.

By O. Penfold, M.R.C.S.

This was done at a small cottage, in which the patient, a multipara, aged 43 years, resided. The operation room was 9 ft. x 7 ft., and the room was just filled by the patient on a stretcher, four doctors and two nurses. Done on Sunday, August 21st, of this year, at 3 p.m., according to Wells' directions and method.

The tumour sprang from the left ovary, and spread itself all over the abdomen, and was mistaken for pregnancy by the patient, who had engaged me, by message, to attend her in her confinement. Her last child was born three years ago. When she had passed about seven months of her reckoning, I saw her, and suspected that she was not pregnant at all—her pinched, anæmic face suggesting something else at once. On examining, per vaginam, the os was found largish, not soft, and closed. I passed a sound in 2¾ inches, a little to the right of the median line, and found the uterus movable. Drew off from centre of swelling, left of the umbilicus, about a drachm of clear greenish straw-coloured fluid, using a small pocket aspirating syringe for the purpose. As she was extremely emaciated, and the breathing was oppressed, I advised early operation, without waiting for a preliminary tapping. The proposal caused such alarm to herself and friends, that other advice than mine was obtained, and I forgot the case. After treatment of some weeks by Mongolian and European practitioners, the husband was sent to interview me, with an apology from the patient and a pressing request to operate without delay. This was done on the date above mentioned. I was assisted by Drs. Atkinson, Hinchcliff and Colquhoun—the latter kindly administering chloroform. I made a small incision below umbilicus, and did not have to extend it; arrested all bleeding from abdominal cut by very hot water on sponges, before opening the main cyst. This contained a large bucketful of clear syrupy fluid, and at the bottom of the cyst was a large hard mass, the size and shape of an average placenta; the mass was fringed with dozens of currant-like cysts. There were no adhesions, and there was a defined pedicle, which was ligatured both through and around its base, and after a little sponging of the exposed parts, and examination of the other ovary, which was healthy, the wound was sewn up. Very little blood was lost. No spray was used, but all the instruments were kept wet with carbolic water of one in forty, as also the hands of those engaged in handling the diseased parts. She was nursed excellently by one of our local hospital nurses. The pulse and temperature never rose above 120 per minute and 99½ degrees respectively. Almost complete starvation was insisted on for four days, only a little ice and four drops of laudanum being taken in that time.

The urine was drawn off by catheter every four hours. A quasi-menstrual discharge came on about the fourth day and continued slightly for a week; the vagina was syringed during its continuance with hot carbolic water daily. The stitches—eight in number—were all removed on the eighth day, and a small quantity of pus let out in withdrawing the second stitch from bottom, and I found a small abscess about the size of a marble there. It gave the patient no trouble, but was very tedious in closing and cicatrising. She was able to pass her urine herself nine days after the operation, and got up within the fortnight. Early in October she left for a change of air, greatly improved in health and strength, and she is now in excellent condition.

Sandhurst, Dec. 1887.

Medical Society of Victoria.

ORDINARY MONTHLY MEETING.

WEDNESDAY, DECEMBER 7TH, 1887.

(Hall of the Society, 8 p.m.)

Present: Drs. J. Williams, Allen, Jamieson, Penfold, Bowen, Hinchcliff, Courtenay, Joyce, Astles, J. W. Barrett, Iredell, J. W. D. Hooper, Beattie Smith, Snowball, Brett, Meyer, G. A. Syme, Neild, J. P. Ryan, Moloney, Shuter, A. G. Black, Howard, and Barker.

The President, Dr. J. WILLIAMS, occupied the chair.

The minutes of the preceding meeting were read and confirmed.

A letter from the Private Secretary to His Excellency the Govenor was read, covering a copy of a despatch from the Secretary of State for the Colonies, containing Her Majesty's commands and acknowledgments concerning the addresses presented to Her Majesty from the Colony of Victoria during the Jubilee.

It was notified that the Committee had accepted the resignation by Dr. Macansh, of the membership of the Society.

NOTICES OF MOTION.

Notice of motion was given by the President, on behalf of the Committee, that the Rules be amended in the following manner:—

> "In Rule 5 omit the words 'An Editor and Two Departmental Editors,' and insert instead the words 'one or more Editors, the number not exceeding three.'"

Dr. HINCHCLIFF gave notice that at the Annual Meeting he would move that at all elections of office-bearers of the Society, members of the Society residing beyond ten miles from Melbourne be allowed to vote by ballot papers, and that the Rules be altered accordingly.

NEW MEMBERS.

The following gentlemen were elected members of the Society: Dr. John Henry Carney, M.B. Melb., of Kyabram, proposed by Dr. J. Williams and seconded by Professor Allen; and Dr. John William O'Brien, M.B. et Ch. B. T.C.D., F.R.C.S.I., of Elgin Street, Carlton, proposed by Dr. Moloney and seconded by Dr. C. S. Ryan.

RESIGNATION OF THE HON. SECRETARY.

Professor ALLEN at this stage begged permission to say a few words personal to himself. He had now been Secretary to the Society for eight years, and had valued highly the trust reposed in him, and the friendly relations into which his office brought him with a large number of distinguished members of the profession. When first he was appointed, he was demonstrator of anatomy in the University, and had abundant leisure, so that he was able to discharge the duties of the Secretariate, how imperfectly he was well aware, but still in no perfunctory spirit. During later years, however, his University duties had increased, and since his appointment to the Deanship of the Faculty of Medicine, it had become impossible to devote to the work of the Society that amount of time which is absolutely necessary for the satisfactory conduct of its business. He had been driven to delay correspondence, sometimes he feared to the point of discourtesy, and craved pardon from any members whom he might have offended in this way. Nor had he been able to keep himself thoroughly conversant with various matters in which the Society and the profession were more or less deeply interested. As there was no prospect of increased leisure in the future, he felt that the time had come when he must request the Society to relieve him of duties which could be discharged more thoroughly by other members. He had been strongly inclined to take this step at the close of the preceding year, but was dissuaded by some of his kind friends in the Committee. The experience of the present year, however, had been decisive; and, thanking the members of the Society for their kindness and consideration, he asked them to confer one other favour by allowing him to retire from a post, the claims of which upon his time had become too great.

Dr. **Penfold** said that the resignation of the Honorary Secretary might have been expected in view of the many claims upon Professor Allen's time. The Committee had learnt that Dr. Allen's decision was final, and he feared that it would not be possible to obtain a successor equal in zeal and ability. He moved "That the Medical Society of Victoria place on record its sense of the honourable and valued services rendered to it during the past eight years by the retiring Honorary Secretary, Professor Allen."

Dr. **Jamieson**, in seconding the motion, said that as Editor of the *Journal*, he had special opportunities of knowing how zealously Dr. Allen had served the Society, and in spite of the depreciatory way in which the retiring Secretary spoke of his work, members generally recognised how thoroughly and satisfactorily the duties of the office had been discharged.

The President, Dr. J. **Williams**, expressed his hearty concurrence in the motion, and mentioned that he was one of those who almost compelled Dr. Allen to continue in office during the present year.

The motion was put and carried unanimously.

Exhibit by Dr. Moloney.

Dr. **Moloney** then exhibited a child suffering from a rare affection of the face.

Dr. **Snowball** thought that he had seen a somewhat similar case, but not so largely developed. He believed the disease was a papular eruption, lichen with a development of anastomosing vessels in the papules. If he was not mistaken, the term "Lichen Cruentum" was applied to it by old writers. He did not think it was true nævus, for simple cutaneous nævus was almost always congenital, a patch being in nearly every case discoverable within a few days of birth.

Dr. J. P. **Ryan** agreed with Dr. Snowball, and suggested the use of styptic colloid.

Dr. **Astles** said that the disease resembled lichen lividus, and recommended painting with tinctura ferri perchloridi.

Dr. G. A. **Syme** thought that the disease was limited purely to the capillaries, and that the larger blotches were capillary nævi. Many cases of nævus were not absolutely congenital. Treatment would probably not be of much avail. It had been suggested to use a fine needle with a broken point, preferably roughened, to insert it at one side of a patch and break up the supplying blood-vessels. The vessels would immediately contract, and there would be no scar.

Dr. **MOLONEY** said that he and Dr. Le Fevre had not seen such a case before. Its chief feature was the presence of patches containing congeries of enlarged capillaries. This character, which was much more obvious in day-light, led them to class the case as one of diffuse nævus. All sorts of applications had been tried. Dr. Syme's suggestion had been taken into consideration, but it was determined not to adopt it till all other measures had failed.

The following paper was then read by the Hon. Secretary:

A CASE OF SUPRA-PUBIC LITHOTOMY—RECOVERY.

Reported by S. ZICHY-WOINARSKI, M.B., &c.

Honorary Physician to the Ballarat Hospital.

W. P., aged 64 years, mining engine-driver, consulted me with the following history:—Had been suffering off and on for the last 25 years with "sand and gravel," and more or less painful micturition, but up to 16 years ago took very little notice of it. He then, owing to severe paroxysmal lumbar pains, consulted a local medical man, and was treated for lumbago; he has been more or less constantly under medical care since then, till he came under my care, with the exception of two years just prior to my seeing him.

Seven years ago, he noticed specially his frequent calls to micturate, being also disturbed at night three or four times, but being easier at night than when getting about. Within the last eighteen months micturition has become extremely painful and frequent, being called on to relieve his bladder every 20 or 40 minutes; has at various periods passed blood, and has noticed the urine dark in colour. Pains were most marked towards the end of micturition, and were referred to the end of the penis.

Last Christmas, whilst micturating, he passed, per urethram, the small stone shown, but never knew of it passing till he heard it drop in the chamber.

Such were his symptoms when he consulted me. Physically, he looked very worn, and was apparently suffering great pain. The urine was offensive, alkaline, and gave evidence of a good deal of cystitis. A.C.E. was administered (as owing to the great pain and urethral tenderness, he could allow no instrument to be used), and a rough large stone was detected, a No. 10 beaked sound being used.

At a consultation held, it was determined to perform the high operation, owing to the size of the stone and the general condition of the patient; he was prepared for operation by the washing out of the bladder with a quinine solution, containing small quantities of liq. opii. sed., and the internal free administration of buchu and inf. triticis repentis, frequent hot hip baths, and suppositories.

On the 9th October, assisted by Dr. Radcliffe, I performed the supra-pubic operation on him, Dr. Salmon administering A. C. E.

For distending the rectum and pushing the fundus of the bladder forwards, I found an excellent means in an ordinary six ounce india-rubber enema syringe, which I introduced, collapsed and well-oiled, by means of a little manœuvring into the rectum, where it at once filled out, and answered admirably, the bone nozzle projecting through the anus.

Prior to introducing this, I had filled the bladder by means of a double channel silver catheter, with boracic acid solution, leaving the catheter in, and tying the penis. The extent of humoral dullness over the region of the up-pressed bladder was easily noted.

An incision 3½ inches long was made over the symphysis pubis, extending upwards vertically, the lower part of the incision reaching just below the symphysis; there was a good deal of subcutaneous fat. Then by repeated cuts, deeper at the lower and shallower at the upper end of the incision, the abdominal muscles were cut through, and the bladder was felt at the bottom of the incision. The wound was then enlarged by nicking with the knife, and some slight venous hæmorrhage was encountered in clearing away the supra-vesical fat. The bladder was then raised by an ordinary tenaculum, hooked to the edges of the wound and opened, and the forefinger passed in. The stone was felt just behind the prostate, seized, and extracted by a lithotomy forceps. I then passed in a full sized drainage tube, diameter ⅓ inch, and stitched it to the edges of the wound, and two stitches were inserted to bring the wound partly together. No stitches were applied to the bladder. I forgot to mention, that when the bladder was raised by the tenaculum, the catheter was withdrawn. An india-rubber soft No. 10 catheter was passed into the bladder, and tied in, and patient put to bed on his side.

The large tube from the bladder in front was immersed at its terminal end into a basin of water.

The subsequent history of the case was very satisfactory, some sloughing however took place around the edges of the wound, and slightly subcutaneously; this I attribute to fixing the drainage tube to the upper, instead of the lower end of the incision. There was a slight rise of temperature for three days, the highest being 101° on the evening of the second day. Urine came both through the catheter and the large drainage tube, by far the most from the drainage tube.

On the 2nd day, the bladder was washed out by boracic solution through the catheter, and twice daily, and subsequently for ten days.

The large drainage tube was removed on the 10th day, the india-rubber catheter still being retained, and being removed occasionally for clearing purposes.

There was comparatively little trouble with the abdominal wound, which healed at the end of the 6th week. The india-rubber catheter was removed finally in the 6th week. The weight of the calculus on removal, was 1206 grains, over 2½ ounces.

The Hon. Secretary then exhibited the calculus.

Exhibit by Dr. Hinchcliff.

Dr. **Hinchcliff** then exhibited a beautiful specimen of the mulberry calculus, and read notes of the case.

The following paper was then read:

NOTES OF A CASE OF DISLOCATION OF THE GREAT TOE.

By J. P. Ryan, Chevalier of the Legion of Honour.

M. S., a strong, healthy young man, had his left foot injured on the 28th of October last, by a horse rearing and falling over on him. He attempted to get up, for he was uninjured elsewhere, but was unable to rest any weight on the foot, and he was carried to a hotel in the neighbourhood.

I was called to see him about an hour afterwards, when there was already considerable swelling about the instep and ankle, and there was so much eversion of the foot that at first I took it for an ordinary case of Potts' fracture. However, on closer examination, I discovered that the fibula was not broken, but that the internal lateral ligament had given way. The foot was easily restored to its normal position, but without some support, eversion again took place.

My attention was drawn to his great toe, by the pain caused there by manipulations, and I found that it was dislocated upwards and backwards, *i.e.*, on its corresponding metatarsal bone. The appearance was as follows:—The toe was shortened by quite half an inch, or more, as compared with its fellow of the opposite side, and pointed more directly forward and a little downwards than it, and the metatarso-phalangeal joint was enlarged from above downwards, caused by the resting of the base of the phalanx on the head of the metatarsal bone. Behind the base of the phalanx was a depression, which was crossed by the tendon of the extensor proprius pollicis. I made an unsuccessful attempt to reduce the dislocation, and left, determined to return later on and give chloroform. In the mean time, I gave directions to have the foot well raised, and kept resting on a pillow on its outer side, and to apply constantly iced water on rags. I was unable to see him again that night, which was a bad one for him on account of pain in the toe, but the next morning under chloroform, and after subcutaneous division of the tendon of the extensor proprius pollicis, I succeeded, by means of extension combined with pressure on the base of the phalanx, in reducing the dislocation, and I fixed the foot with paste-board and a starch bandage. Four days later I renewed the dressing, which remained untouched for a fortnight, and since then, on account of considerable swelling of the foot which remained, he has employed hand-rubbing and a flannel bandage. He has been using the foot for the last week, and does not complain of the toe being weak or painful, though there is still some fulness about the metatarso-phalangeal joint, and the power of extension is somewhat more limited than on the other side.

The points of interest in the above case are, first, the comparative rarity of simple dislocation of the great toe; and second, the facility with which the dislocation was reduced under chloroform, after division of the tendon of the extensor proprius policis.

Dr. Hinchcliff said that dislocation of the great toe and thumb were very rare, and that the treatment was sufficiently difficult to baffle the best surgeons. He had seen only one case affecting the great toe, but had met several dislocations of the thumb. Cases seen immediately after the injury might permit of easy reduction; but when several hours had elapsed, it was necessary to divide the lateral ligaments or the tendons of the flexor brevis policis subcutaneously, and preferably under antiseptic precautions; reduction could then be effected with ease.

Dr. Moloney said he had repeatedly seen tetanus follow injuries of the thumb.

Dr. J. P. Ryan said that Malgaigne did not mention tetanus as a sequela of dislocation of the thumb or great toe. For dislocations of the fingers, the ordinary finger forceps gave an excellent grip; but for those of the thumb and great toe a kind of cage of Mead's plaster was most serviceable in applying traction.

Exhibit by Dr. Jamieson.

Dr. Jamieson then exibited a specimen from a case of malignant disease of the thorax, the symptoms which had simulated those of aneurism of the aorta below the arch.

Nomination of Office-bearers for 1888.

A ballot was held during the evening for the nomination of the Office-bearers of the Society for the year 1888. For the following offices there will be no contest:—President, Dr. J. P. Ryan; Hon. Treasurer, Dr. Bowen; Hon. Secretary, Dr. J. W. Barrett; Hon. Librarian, Dr. Webb.

For the other offices, the numbers of nominations received were as follows:—Vice-Presidents (2), eight; Members of Committee (6), twenty-nine; Auditors (2), five.

British Medical Association.

VICTORIAN BRANCH.

Ordinary Monthly Meeting.

Wednesday, 30th November, 1887.

(Hall of the Royal Society.)

The President, Dr. **Willmott**, and afterwards the Vice-President, Dr. **Simmonds**, in the chair.

New Members.

The Hon. Secretary announced the election of the following new members:—Dr. Davenport, of St. Kilda; and Dr. O'Brien, of Carlton.

He also announced that the following gentlemen had been elected to represent the Branch on the Committee of the Intercolonial Medical Congress:—Dr. Cutts, Dr. Henry, Dr. Rowan, Dr. Springthorpe, and Mr. Rudall.

The following paper was then read:—

THE NECESSITY OF PRIVATE HOSPITAL TREATMENT FOR CURABLE CASES OF INSANITY.

By James De Burgh Griffith, M.B., Dublin.

Since the time when lunacy was regarded and treated as a crime, great strides have been taken in the direction of ameliorating the condition of the insane, and thereby improving their chance of recovery. But who will say that the study of causes and treatment of insanity has kept pace with that of the other human ills. With the aid of all the appliances of modern science, medicine and surgery step on apace, and the turbid stream of disease is being followed nearer and nearer to its sullied source. Yet what is there in psychological medicine to correspond with this general advance, or to show that we understand anything more of the causes of insanity, or have clearer views of its proper medical treatment?

The large county asylums of England, and our fine asylums in this colony are not, in my opinion, the best places for the treatment of curable cases of insanity, but are well adapted for the care of the insane. The asylum of to-day does not belie its name—it is in truth a refuge, a sanctuary, an asylum for the mentally afflicted, and in most cases it is nothing more. So long as we continue our present system of sending curable cases of mental disorders to live with chronic maniacs, dements, and gibbering idiots, so long shall we continue to increase our insane population, and so long will psychological medicine remain in the back-ground.

The large asylums in England and this colony are admirable places for the reception and care of the hopelessly insane of the lower orders, but they cannot well be made hospitals for the treatment of mental disorder. It is almost impossible that the medical superintendent of a large asylum can give to recent and curable cases the time and thought they require. The superintendent of an asylum does not long remain a doctor after he assumes his duties. All his efforts to treat insanity soon dwindle into some administrative hobby as to the economy of management. Again, I think it must be admitted that even if curable cases could receive the necessary medical attention, a large asylum filled with chronic lunatics is hardly the best place for treatment. That repose and quiet so necessary is not to be found in such a place, nor the quiet of the sick room in the midst of chronic lunatics. These several objections apply more especially to the treatment of recent and what are thought to be curable cases. As an illustration, take a case of puerperal mania occurring in a young woman. How much greater will be her prospects of recovery in a well-ordered hospital than in a large barrack lunatic asylum, however well managed; for in addition to the nursing and medical objections which have been urged, there is the disagreeable idea in the mind of the patient that she has been locked up in a lunatic asylum, and this feeling, I am sure, frequently retards recovery.

Now, how are we to remedy this state of affairs? The answer is, by the establishment of a hospital for the treatment and cure of mental disease, similar to those which at present exist in a few places in England; and while these are to all practical purposes "Private Asylums" they are not "proprietary," and therefore embrace the advantages of a home-like retreat, without any of the real or imagined objections of a private madhouse.

In the few private hospitals of this type in England the recovery rate is much higher than in the large county asylums. In these hospitals, of which Barnwood House in Gloucester is a good example, an attempt is made to treat the patients individually, and we have the result of this in a considerably increased recovery rate; during last year the proportion of recovery per cent. in English county asylums was 38·9 per cent., and in private hospitals it was 48·7 per cent. At Barnwood House Hospital the commissioners' report states that the proportion of recoveries to admissions was 52·5 per cent.

During a recent visit to England I had the advantage, through the courtesy of Dr. Needham, of inspecting this hospital. It is as unlike an asylum for lunatics as can possibly be imagined, but on the contrary presents the appearance of a very comfortable and spacious country residence. It is constructed to accommodate 150 ladies and gentlemen, and these are accommodated with private bedrooms neatly furnished, and the drawingrooms and dining rooms are luxuriously fitted up. Patients of both sexes associate together, both at meal times and during the day. The gardens and grounds are extensive and handsome, and afford ample room for recreation or amusement. The weekly average cost per head was £1 13s. 9d., and the average weekly receipt per patient £2 9s. 5s. Last year the receipts after paying all expenses were £6000, which sum does not go into the pockets of shareholders or proprietors, but is expended on the establishment generally. These institutions are not only self-supporting, but also yield a surplus after paying all expenses. The origin of this and similar hospitals in England was a grant from Government, to which was added a large amount of money subscribed by the county nobility and gentry for purely philanthropic purposes, and the hospital is managed by a medical superintendent acting under the supervision of a committee of management. The cost of building such a hospital is estimated in England at about £200 a patient.

Now, referring to this colony, we find there is no private asylum for the insane at present existing, and no intermediate hospital between the patient's home and the large and overcrowded pauper lunatic asylumns, which are repugnant both to the patients and to the friends of people in the middle and upper classes of our society; and as the Government of this colony have forbidden private asylums, it is clearly their duty to establish some substitute therefor, and if money were advanced for this purpose by the State it could most certainly be repaid to the State, interest and capital, within the customary thirty years, out of the payments of patients, and after they have received the most liberal treatment, without the opprobrium of being locked up in a pauper lunatic asylum.

It may fairly be asked, is there any real want for a private hospital for mental disease in this colony? and is it not likely that people will continue to be satisfied with the existing arrangements? The reply is, that paying hospitals for other purposes are prosperous and flourishing, and there is no reason to believe an institution for mental disorder would be an exception; and secondly, people are not satisfied with existing arrangements, and strong objections are raised by the friends of ladies and gentlemen who are forced into the large asylums. Personally, I know of several instances where people of good social position have been doomed to associate for months with the lower classes of patients in a pauper lunatic asylum. In the colony of New South Wales there are one or two flourishing private asylums, managed and owned by private individuals, and farmed for profit, and these are supported, no doubt, largely by patients from this colony. The type of State hospital that I have sketched would combine all the advantages of the best private asylum, and would escape the objections that apply to proprietary institutions, and it is high time that some effort was made in this direction.

A discussion followed, in which Dr. Neild, Dr. Joyce, Dr. Henry, Dr. Springthorpe, the Chairman, and Dr. Owen took part. A resolution was adopted, urging upon the Legislature the desirability of such an amendment of the Lunacy Act as would embody the suggestions of the author of the paper.

Dr. **Springthorpe** then read a paper on "Fifty cases of Epilepsy."

In the discussion which ensued, Dr. Neild, Dr. Henry, Dr. Griffith, Dr. Rowan, Dr. Joyce, and Dr. Meyer took part. Dr. Rowan mentioned a case of peripheral epilepsy, which was due to ingrowing toe-nail; and Dr. Meyer one in which the removal of an ovarian tumour was followed by a cure of epilepsy, to which it had been due.

Exhibits.

Dr. **Joske** exhibited the larynx of a patient successfully excised by Dr. Gardner, of Adelaide, for malignant disease, nine months ago. He also showed an artificial larnyx which was occasionally worn by the patient, who, however, was able to make himself understood without it.

A sample of the new sweetening principle obtained from coal tar, and to which the name "saccharine" has been specifically given, was submitted by Messrs. Francis and Co. In appearance it is exactly like powdered white sugar, and a very small quantity placed upon the tongue conveys the sensation of extreme sweetness, but it leaves a slightly astringent effect, which however, would probably not result if the substance were greatly diluted.

Intercolonial Medical Congress of Australasia.

The Provisional Committee of the Intercolonial Medical Congress held its first meeting, on the evening of the 6th inst., in the Hall of the Medical Society of Victoria. The President-elect, Mr. T. N. Fitzgerald, occupied the chair, and there was a large attendance of members, including representatives of the Medical Society, the Victorian Branch of the British Medical Association, the Ballarat District Medical Society, and the Bendigo Medical Society.

PRESIDENT'S ADDRESS.

The PRESIDENT-ELECT, in opening the proceedings, said that a debt of gratitude was owing to the members of the profession in South Australia for their courage and scientific spirit in initiating a series of Intercolonial Medical Congresses, and also for the hearty hospitality which was displayed towards visitors during the progress of the first session. At the close of that session a special meeting was held to elect the President for the second session, and to determine the place and time at which it should be held. The meeting did him the honour of electing him President. Professor Allen, after consultation with all the Victorian representatives who were present, kindly undertook the responsible duty of inviting the Congress to hold its next session in Melbourne, and this suggestion was unanimously agreed to. Debate then arose concerning the date, the general feeling being that the meetings should not be too frequent, for otherwise they would lose in dignity and weight. Ultimately, it was resolved that the second session should be held in 1890, or at such earlier time as the Medical Societies of Victoria might determine. Professor Allen undertook to lay the matter before these Societies, and would now read an abstract of his correspondence.

PROFESSOR ALLEN'S REPORT.

Professor ALLEN reported that, on returning from Adelaide, he submitted the following proposal to the four Medical Associations of Victoria:—That the medical societies of Victoria empower a Provisional Committee to fix the date of the next session of the Intercolonial Medical Congress of Australasia, and to make all needful arrangements for such session until a general meeting of enrolled members can be held at which a progress report shall be submitted, such Provisional Committee to consist of the President-elect, six representatives chosen by the Medical Society of Victoria, six by the Victorian branch of the British Medical Association, three by the Ballarat District Medical Society, and three by the Bendigo Medical Society, the Committee having power to add to its number. The four Associations approved this proposal, and representatives were appointed as follow:—By the Medical Society of Victoria—Professor Allen, Dr. J. Jackson, Mr. E. M. James, Dr. Jamieson, Dr. Neild, and Dr. J. Williams; by the Victorian Branch of the British Medical Association—Dr. Cutts, Dr. Graham, Dr. Henry, Dr. Rowan, Mr. Rudall, and Dr.

Springthorpe; by the Ballarat District Medical Society—Mr. Radcliffe, Mr. Tremearne, and Mr. Whitcombe; by the Bendigo Medical Society—Dr. Hinchcliff, Mr. MacGillivray, and Mr. Penfold.

Election of Officers.

On the motion of Mr. E. M. James, seconded by Mr. MacGillivray, Professor Allen was unanimously appointed Secretary. Professor Allen accepted the position, but intimated that, as the official duties would be onerous, he would, at an early meeting, request that associate Secretaries be appointed. On the motion of Professor Allen, seconded by Mr. Penfold, Dr. Graham was unanimously elected Treasurer.

Power to Add to Number of Committee.

The **President-elect** said that the next business was to consider the power of the Committee to add to its number. This introduced a question which he deemed of fundamental importance as regards the success of the Congress. It was, unfortunately, a fact that the the recent Congress in America fell short of the success which it should have achieved, in consequence of internal dissensions in the profession. Probably this was due to a want of care in the conduct of business at the very initiation of the Congress, sufficient precautions not being taken to make the Managing Committee truly and fully representative of the profession. Even in this colony it might be said that the four Societies, whose delegates were now assembled, did not fully and completely represent the profession. There were several eminent members of the profession holding high official positions whose absence from the Committee must be an element of weakness, and he was inclined to think that it would be wise for the Committee to exercise somewhat freely, though with due care, its power to add to its number.

Discussion followed, in which general concurrence was expressed with the views of the President. On the motion of Dr. Springthorpe, seconded by Dr. Hinchcliff, it was resolved to invite the following gentlemen to join the Committee:—The Chancellor of the University, the President of the Medical Board of Victoria, the Government Medical Officer, the Inspector-general of Asylums, and the Government Botanist. It was further resolved, on the motion of Mr. MacGillivray, seconded by Dr. Jamieson, that at the next meeting proposals for the appointment of additional members be received, so as to secure a full representation of the profession.

DATE OF NEXT SESSION.

On the motion of Dr. J. Williams, seconded by Dr. Hinchcliff, it was unanimously resolved that the second session of the Congress be held in 1890. The exact date was left for settlement at a subsequent meeting.

TERMS OF MEMBERSHIP.

On the motion of Dr. Jamieson, seconded by Mr. E. M. James, it was resolved that payment of one guinea constitute membership, and entitle every member to a copy of the published transactions of the Congress. It was also resolved on the motion of Dr. Hinchcliff, that a guarantee fund be established to provide for any possible liabilities which might remain at the conclusion of the Congress, the liability of each guarantor being limited to £5.

APPOINTMENT OF SUB-COMMITTEE.

The President, the Secretary, Dr. Cutts, Dr. Neild, and Dr. Williams were appointed a Sub-committee to draft a circular addressed to the members of the profession throughout Australasia, such circular to be submitted for approval at the next meeting of the Provisional Committee. The Sub-committee was requested, also, to draft rules for the guidance of the Committee in matters of procedure.

DATE AND PLACE OF NEXT MEETING.

It was resolved that the Committee meet again on Tuesday, January 10. Professor Allen, on behalf of the Committee of the Medical Society, offered the use of the Hall of the Society for all meetings of the Provisional Committee. The offer was accepted with thanks.

The Committee then rose.

Hospital Reports.

MELBOURNE HOSPITAL.

Rheumatism—Ulcerative Endocarditis Gangrene in Legs.

Under care of Dr. MOLONEY.

Reported by Mr. A. V. M. ANDERSON, M.B., Ch.B.,
House Surgeon.

T.F., æt. 31, bootmaker, was admitted on October 14th, 1887, complaining of pains in the shoulders, arms, and right foot, which had been present for two days.

Six weeks previous to admission he had an attack of what he called "rheumatic fever." He says he suffered mostly from pains in the chest, back, and limbs, but not in any of the joints. These pains had been gradually wearing away, but had not quite left him. Two days before admission he had a severe rigor, followed by a return of the pains.

On admission, he complained of pains in the shoulders, arms, and right foot. There was slight swelling and redness of the upper part of the left foot, but there was no swelling elsewhere. The tongue was moist and coated; appetite poor, great thirst; temperature 101° after bath; was sweating freely; urine dark-coloured, acid, sp. gr. 1020, slight mucous precipitate, no albumen; lungs normal; heart sounds excited, no bruit. Patient stated that up till six weeks previously he had never had a rheumatic attack. He was given a saline aperient, and the Haust sodii salicyl. (sodii salicyl. gr. xx) every four hours; also foments to joints. The pains in the joints continued for three days. He then complained of pain in the lower part of both legs.

On the 17th his temperature was normal, but his tongue was dry in the centre; the pulse weak and compressible, and patient was slightly delirious. He was given a mixture of ammon. carb. gr. x, mucilaginis ʒj, tinct. digitalis *m* x, aqua ad ℥j, 4tis horis.

On the following morning the patient was in the same low condition, and it was noticed that the lower part of the right leg was livid and cold, and that sensation in it was very much impaired. The veins in the upper part of the leg were enlarged and slightly hard. This condition extended only from the middle of the leg, and involved the back rather more than the front of the leg. There was no pain or hardness in the course of the arteries of the thigh or leg. On the same day it was observed that there was a blowing systolic murmur audible at the heart's apex, the sounds having been previously normal.

The gangrenous condition of the right leg became more marked every day, and on the 21st there was slight coldness, lividity, and insensibility of the lower part of the left leg.

Patient was given on the 20th a pill containing one grain of sulphide of calcium three times a day, and port wine foments were applied to the legs. Stimulants were also freely given internally.

A purpuric patch appeared on the left instep on the 22nd.

During the patient's stay in the hospital only one rigor was observed. This was on the 22nd, and was followed by profuse sweating. The patient became gradually exhausted, and died on the 23rd of October.

A post-mortem examination revealed the existence of ulcerative endocarditis of the mitral valve. There was a perforation of one of the segments of the valve, the edges of the perforation being eroded and fringed with vegetations. In addition to this condition of the heart, and the usual pyæmic lesions in the viscera, there was found to be plugging of the right external iliac artery, the plug extending down to the commencement of the femoral. The same condition existed, but to a slighter extent, in the left external iliac artery. The plugging did not extend in either case to the vessels of the leg.

Fracture of Base of Skull—Double Contrecoup Fracture of Frontal Bones.

Reported by Mr. A. V. M. Anderson, M.B., Ch. B.,
House Surgeon.

J.B., aged 37, was brought to the Hospital at 5 p.m. on the afternoon of December 4th. A constable had found him lying on the pavement, and bleeding from a wound on the back of the head.

On examination, he was found to have a small scalp wound over the occiput, and slightly to the right of the midline. The wound was found to be quite superficial. No trace of fracture of the skull could be found; no subconjunctival ecchymosis. The patient's breath smelt strongly of alcohol, and he was in a dazed, muddled condition. The usual treatment was applied, and patient, before he left, was able to give his name and occupation, and to walk with the assistance of a constable. He also said that he had been drinking.

Three hours later he was again brought up. He was then insensible; his pulse was weak and frequent; his breathing stertorous, and his pupils quite insensible to light, but equal and normal in size. He died a few minutes afterwards.

A post-mortem examination showed that there was a linear fracture of the base of the skull, starting almost under the scalp wound, and running down to the foramen magnum. The orbital plate of the frontal bone on each side was fissured to the extent of about one inch, the fissure being almost transverse. There was considerable hæmorrhage under the dura mater, the blood being most plentiful at the posterior and anterior parts of the cranium; but the blood was extravasated more or less under almost the whole extent of the dura mater.

The brain was extensively lacerated anteriorly, the laceration being most marked on the under surface of the right frontal lobe.

Australian Medical Journal.

DECEMBER 15TH, 1887.

TYPHOID FEVER AND CONTAMINATED MILK.

In the present number of the Journal our readers will find a letter from Dr. Shields, the Government Medical Officer, remarking on certain statements in the leading article in our November number. In that letter, two quite distinct questions are raised, which are of very unequal interest, and we desire to dismiss the second of them very shortly, though to it the greater part of Dr. Shields' remarks are devoted. As may be remembered, the leading article in our last number was occupied with an account of the report on typhoid fever, which had just been issued by the Central Board, an appendix to the report being occupied with a discussion of the causes leading to a severe outbreak of fever at the Geelong Grammar School. Space did not allow of anything like a full *resumé* of the facts set forth in that appendix, and indeed, there could not have been any adequate discussion of the argument, and of the conclusions arrived at, without an almost complete reproduction of the document. What was said was merely intended to convey our opinion that the conclusion, pointing to contaminated milk as the cause of the outbreak, was not fully established. That there was some evidence in favour of that view was not, and is not denied; but the negative evidence, as is too frequently the case in such inquiries, was almost completely ignored. A small quantity of milk was got on very few occasions from Stokes' Dairy, as an addition to a large quantity sent out from Trueman's Dairy, from which the Grammar School was supplied. So far as evidence was forthcoming, even this trifling amount of Stokes' milk was not delivered to the Grammar School. Trueman's own milk never had its purity questioned, and yet this milk in a mysterious way, caused a large number of cases in the School, while Stokes' own milk, delivered direct to his own customers, or at second hand by Trueman, was not shown to have had any similar effect in spreading the disease. This is the negative side, which we thought was almost completely ignored, and a wrong, or a very incomplete impression conveyed of the outbreak and its concomitants. The link appears to have been forged in this way: A jug was used to convey milk from Stokes' house to a family named K., where typhoid existed. That jug was perhaps infected; from it the can conveying milk from Stokes' house to Trueman's was perhaps infected, that can perhaps again infecting milk, whose original purity was not impeached, to such an extent and for such a time, that it caused a series of 25 cases in the school, occurring between the 2nd and 22nd of May. After careful consideration of the whole case, and Dr. Shields knows that there was a good deal of consideration and discussion given to it, we are compelled to express the opinion even more strongly than before, that the positive evidence implicating Trueman's milk, was not sufficient; and further, that the positive evidence, as set forth in the report, was greatly weakened by an almost complete ignoring of the negative side, *i.e.* of the failure to produce disease, where it might with still greater reason have been expected to occur. We have not questioned either the care with which the inquiry was made, or the correctness of the facts and figures; but taking the facts as set forth, we have ventured, without any intentional breach of courtesy, to question the validity of the conclusions which were based on them. As to the subsidiary point about the disagreement by Dr. Carstairs, we can only say that we took the statement on the subject from the report itself, and even with the additional knowledge now supplied in the letter, it is not at all clear to what extent that disagreement went.

The difficulty of these etiological inquiries, and the absolute diversity of opinions which may honestly be arrived at, are very clearly shown by the recent discussions, as to the relation existing between scarlatina and contaminated milk. The true interests of science are often better conserved by abstaining from any conclusion, than by insisting on arriving at definite results when the evidence is insufficient for the purpose.

COMPULSORY NOTIFICATION OF DISEASE.

But as was said, there is another question raised by Dr. Shields in his letter, and one much more important than any about the truth or error in a particular inquiry. The question of the compulsory notification of disease has been fairly raised in this Colony, and it appears as if a trial would soon be made of its efficacy, as a help in keeping in check the spread of contagious diseases. We fear that there is, on the part of the members of the Central Board, a simple faith in that procedure which can hardly be justified by results, unless it is supplemented by other measures of a much more drastic kind. Mere notification is not an end in itself, as one might be tempted to believe that the Central Board regards it, from the persistent way in which the necessity for its adoption is harped on, without similar recognition of the need for power to isolate first cases, and for other measures of an unmistakably preventive kind. Dr. Shields finds fault with the reference made in our leading article to the provision for notifying the occurrence of cases "attended with eruption or eruptive symptoms," as being absurd. He not only defends that proposal, but charges us with unfairness in not stating at the same time, that this provision is only to be enforced when small-pox has been officially declared to be present in the Colony. To this charge of unfairness we can give the easy reply: (1) that the reference to the provision was merely casual; (2) that when we discussed the Amending Health Bill in the August number of the Journal, we mentioned this fact; and, even with that limited range of application, ventured the opinion that the provision was too absurd to be seriously discussed. We were entitled to assume on the part of our readers, some knowledge on a point which concerned them all so closely. Our error really consisted in thinking that the clause was the product of the combined unwisdom of the majority of the members of the Board, who have no claim to be regarded as entitled to speak on such delicate and difficult questions. We must confess, therefore, to a feeling of regret that Dr. Shields, whom we have always regarded as standing on a different footing from most of his colleagues in point of qualifications, should stand forward as the champion of the Board, on a point with regard to which we charitably believed that he must have been overborne by numbers. To make sure that the provision is understood, we reproduce in full the clause in the Amending Health Bill, merely punctuating, and italicising a few words for the sake of giving them prominence: "If at any time the disease of small-pox is, by a notice in the *Government Gazette*, declared to be present in Victoria, the person owning, occupying, or in charge of any house or building in which *any disease, illness, or complaint attended with eruption or eruptive symptoms occurs*, who neglects to report the occurrence of such disease, illness, or complaint to the local board or the health officer of such board, or to the officer of the police for the district, *immediately* on the existence of such disease, illness, or complaint coming to such person's knowledge, shall, on conviction for such neglect, forfeit a sum not exceeding Twenty and *not less than Two pounds*; and if, in any summons under the provisions ot this section, failure to report is alleged, the proof of compliance with such provisions shall be upon the defendant." If this means anything, it means that persons becoming aware of cases of acne, herpes, urticaria, and even the strophulus of infants, are bound to report them immediately, under threat of a minimum penalty of Two pounds; and nothing more is needed to show that the clause is too absurd to admit of serious discussion. But then Dr. Shields asks, "In what does the absurdity consist?" Well if he does not see any absurdity, in the light of what we have just shown to be necessarily involved in the provision, we can only explain it on the supposition that his judgment has been darkened for the time by his association with the Central Board. It is useless to say that people will never be so foolish as to carry out the provision fully and in the literal sense; but this is only to say that the average uninstructed householder is to be trusted to distinguish between cases which should be reported and those which should not—both classes coming equally under the wording of the clause. But even with this, we are not done. The profession was entitled to expect that the professional members of the Board would have striven to get any clause, which makes notification compulsory, put in a way not to be unnecessarily offensive. But here is the clause in the proposed Bill, with only some removal of verbiage: "Whenever any place in, or part of Victoria appears to be affected by any dangerous, infectious, or contagious disease, the Central Board may, by notice published in the *Government Gazette*, require all medical practitioners, deputy registrars, state school teachers, and members of the police force, residing in such place, to report such occurrence by telegraph or by letter to the Central Board in such form as the Central Board shall prescribe, immediately on such occurrence coming to his or their knowledge." The question may fairly be put, as to why medical practitioners should be compelled under threats, to place their knowledge and skill at the disposal of the Central Board, without fee or reward; and also, why, without reason assigned, they should be classed with policemen and other Government servants, from whom of course much can be claimed. And why should a stop be made at medical practitioners? It will not unfrequently happen that a chemist becomes aware of the existence of such cases, when no medical man is in attendance, and why should chemists not be brought under the provisions of the clause? Then, if it is important that notification should reach as soon as possible those who have to adopt measures of precaution, and this may be presumed to be the intention, why should not such information be sent to the Local Board, instead of being sent to Melbourne, and from thence, sent back to the Local Board, it may be after an interval of several days? But, even with these defects, we are not done. The object of compulsory notification is to enable steps to be taken for checking a disease on its first appearance in a district, but here we have its existence assumed to be well-known, for a time long enough to allow a notice to be inserted in the *Gazette*. Very often the compulsory notification would be too late to allow of preventive measures being effectively carried out, or happily it might be made unnecessary by action on the part of the local authorities, before the Central Board could bring its cumbrous machinery into operation. Then the wording is far too loose. There should be a distinct and specific enumeration of the diseases described as dangerous, infectious, or contagious diseases. It may be taken as certain that no Stock Act would be allowed to pass with such vague phraseology. And after all, to what purpose is this elaborate, and yet inefficient arrangement for obtaining information about the occurrence of certain unnamed diseases, without power being given to take effectual measures for checking their spread. Without power to isolate first cases, the most complete system of notification will very often be but a busy idleness, and yet, so captivated is the Central Board with an aimless procedure, aimlessly carried out, that it has been successful in urging the Chief Secretary to introduce into Parliament a single clause Bill, to compel medical men to report cases. It was manifestly unfair to a large body of men, filling important positions, and constantly rendering service to the public in many ways, to rush into Parliament, within a few days of the end of the session, a measure like this, which needs fuller and calmer consideration than it has yet received. The proposal is distinctly a new departure in sanitary legislation, since in Great Britain compulsory notification is a local question—the authorities in a town or city merely having power to frame byelaws requiring medical practitioners to report cases of epidemic diseases, and to pay them for such reports A considerable number of towns in England and Scotland have adopted such bye-laws, but any one who has followed the discussion on the subject which has lately been going on in the *Lancet* and *British Medical Journal*, must have noticed that there is no approach to unanimity about the results. It is also clear, that the effect depends in great part on the judgment displayed by the local authorities, as on that depends the readiness with which medical men perform the duty laid upon them. We have always held that epidemic diseases can never be efficiently dealt with, in the absence of some system for securing early notification of the occurrence of the first cases. But it would be well if the Central Board had borne in mind, when framing its Bill, that sanitary measures can be well and thoroughly carried out only with the cheerful co-operation of the members of the medical profession; and we must again express regret that the medical members of the Board did not succeed in better impressing on their colleagues this very evident fact. It is to be feared, from what transpired at meetings of the Board, that some, if not all of them, rather aided and abetted in framing and pushing forward the clauses on which we have felt it necessary thus severely to remark. Happily the offensive and futile one clause Bill has been withdrawn.

Reviews.

CHAMPNEYS ON ARTIFICIAL RESPIRATION.*

In this little book Dr. Champneys has collected a number of papers read at various times before the Medico-Chirurgical Society, and published in its Transactions. As the title shows, these papers are largely a record of experimental work, bearing on the comparative value of methods which have at different times been proposed for carrying on artificial respiration, and in particular, as to their applicability to the new born child. The results of the inquiry were greatly in favour of Silvester's well-known method, to which the first place is given, that of Schultze, which is comparatively little known or practised by English obstetricians, coming after it in point of usefulness. The Marshall Hall and Howard methods, however suitable they may be in the case of adults, were found on the contrary to be almost without value. The allied subjects which were investigated, are the mechanism whereby mediastinal emphysema and pneumothorax are occasionally produced in cases of tracheotomy, and the exact mode of production of emphysema of the neck occurring during labour. A short chapter is also devoted to a discussion of the conditions which affect, or are supposed to affect the ease with which artificial respiration is carried on in the stillborn child. The conclusions are: "(1) that air in the abdominal viscera, even to distension, does not interfere appreciably with the process; (2) that pressure on the cricoid cartilage and bending the head do not prevent the entrance of air into the stomach in mouth to mouth inflation, unless the pressure and bending are such as also to prevent the admission of air into the trachea; (3) that hanging back of the head does not secure patency of the upper air passages, catheterisation of the glottis being sometimes necessary." The last chapter is a reprint of an article published in the *International Journal of the Medical Sciences*, and contains a summary of the results detailed in the previous chapters, giving also an exact account of the best means for carrying out artificial respiration to a successful result. We can heartily recommend the work to the attention of all who are engaged, as most medical men are, in the practice of obstetrics. J. J.

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* Experimental Researches in Artificial Respiration in Stillborn Children and Allied Subjects. By Francis H. Champneys, F.R.C.P.L. London: H. K. Lewis, 1887.

University Intelligence.

MELBOURNE UNIVERSITY.

At the meeting of the Council on the 21st ult., a letter was received from the Committee of the Alfred Hospital, declining the proposal to reserve the out-patient or any other department exclusively for lady students, while expressing willingness to give them opportunities of receiving clinical instruction. It was decided to forward a copy of the letter to the lady students.

Dr. Bride moved, "That the Registrar be instructed not to invite or receive applications for lectureships or examinerships, unless expressly directed to do so in any particular case or cases." The motion was negatived.

The Council met on Saturday, the 3rd inst., for the purpose of conferring degrees. The following gentlemen were admitted to the degree of Bachelor of Medicine:—Joseph Francis Bartley, George Lawaluk Bell, Henry William Cardiff, Frank Hobill Cole,

Joseph Cookson, Walter Joseph Craig, Frank Smith Crowther, John Herbert Evans, Charles Edwin Goodall, Horace Frederick Hayes, Thomas Edwin Ick, Frederick David Jermyn, Percy Herbert Liddle, Daniel Florance Macgillicuddy, Conway Montgomery M'Knight, James Frederick Merrillees, Joseph John Miller, William Joseph Alleine Moss, Lionel Francis Praagst, Richard Rawdon Stawell, Charles Stanford Sutton, Johnstone Simon Thwaites.

Messrs. Bell, Cardiff, Cole, Goodall, Hayes, Macgillicuddy, and Merrillees, also received the degree of Bachelor of Surgery.

At the meeting of the Council on the 5th inst., James Jamieson, M.D., was elected Lecturer on Theory and Practice of Medicine, in place of Dr. S. D. Bird, who had resigned; and W. Balls-Headley, M.D., was elected Lecturer on Obstetrics and Diseases of Women and Children, in place of Dr. Jamieson. The other lecturers were re-elected.

At a meeting of the Council on the 12th inst., the time was occupied chiefly with some complaints of irregularity in connection with examinations by Professor McCoy, in the subject of Physical Geology, three candidates who had been returned as failed, having afterwards been passed. The Council decided to revert to the original return, the students having the right of appeal, if they thought fit to exercise it. The Registrar made a statement as to some other complaints which had been made, after which Mr. Higgins moved "That, in the opinion of the Council, there is no foundation for any charge of blundering against the office." The motion was agreed to unanimously.

At a meeting of the Senate on the 22nd ult., Mr. R. Murray Smith, C.M.G., being the only candidate nominated for the vacancy in the Council caused by the resignation of Dr. Mackay, was declared duly elected.

New regulations increasing the number of scholarships and exhibitions were considered, a proposal to make a re-arrangement in favour of the medical students of the second year being negatived.

At the recent Ordinary Examinations, the following students passed in the respective years :—

First Year Medicine.

Charles William Baird, Edgar Alfred Barrett, William Ernest Bennetts, Henry Porter D'Arcy Benson, Edward Brookes, Ralph

Charles Brown, Robert Andrew Buntine, Edward Champion, Charles Arthur Courtney, Alfred Cowen, Frederick Waltham Dickins, John Gordon, Thomas James William Kenny, George Joseph Ley, Frank Ernest Littlewood, William David Kerr Macgillivray, William Kennedy Muir, George Gray Nicholls, Annie Genevieve O'Hara, Elizabeth Alice Maude O'Hara, Charles Joseph Sabelberg, Ernest Edward Robert Sawrey, Robert Ernest Shuter, James Henry Sleeman, Grace Clara Stone, Robert Henry Strong, Arthur Bridges Webb, Margaret Whyte.

Second Year Medicine.

Stanley Seymour Argyle, George Bill, Thomas Hugh Boyd, Egbert John Connell, John Thomas Robert Cook, John Henry Joseph Crowley, Lawrence Davies, Leslie Davies, Horace Percy Godfrey, William Henry Harbison, John Richards Harris, John Leslie Henderson, Caleb Joyce, James Charles Kennedy, John James Kitchen, William Lowe, William Robert Matthews, Henry James Adolphus Mau, John Gilbert M'Kay, William Wilkinson Boothroyd Pinniger, William Henry Rigby, Garnet Soilleux, Edward Alfred Strahan, James Livingstone Thompson, Henry James Winning.

Third Year Medicine.

John Edward Barrett, Alexander Bruce Bennie, Richard Kingston Bird, Albert Otto Bobardt, William Isaac Boyes, Walter Hansford Bracewell, Thomas Cherry, George William Damman, Denis Doolan, Joseph Milton D'Amer Drew, John Raymond Fox, Patrick Francis Gleeson, Clarence Godfrey, William Jens Gregerson, Emil Gutheil, Walter Thomas Harse, William Waugh Hope, William Kenny, Matthew Lang, Robert Livingstone, Horatio Percy Martell, John Michie, Arthur John Nyulasy, Frank Montgomery Peebles, George Owen Rigby, John Melby Scott, Robert Glen Vickery, James Ramsay Webb.

Fourth Year Medicine.

John Chalmers Baird, Arthur Gideon Hugh Colquhoun, Francis John Drake, Edward Henry Embley, Patrick James Flanagan, Edward Leslie Gault, William Howard James, Francis Henry Langlands, Richardson Wakefield Lewers, Edward Allan Mackay, Richard Augustus Aloysius Manly, George Frederick M'Williams, Thomas Murphy, William Perrin Norris, John Quilter, James Ferdinand Rudall, Francis Edward Webb.

Fifth Year Medicine.

The names are the same as those of the gentlemen who obtained the degree of Bachelor of Medicine.

The following are the numbers of those who presented themselves for examination, and who passed in each of the years :—

	PRESENTED.	PASSED.
First M.B.	65	28
Second M.B.	34	25
Third M.B.	38	28
Fourth M.B.	20	17
Fifth M.B.	25	22

The following are some of the papers set at the recent Ordinary Examinations in Medicine :—

BIOLOGY—PART I.

(All answers must be illustrated by sketches.)

1. Give some account of the anatomy of the common earth worm.

2. Describe briefly and compare the structure of the stem in (1) Chara, (2) Pteris, (3) Vicia.

3. Describe the formation of the germinal layers in the frog: what are the important differences in this respect between this and Amphioxus?

4. Give some account of the respiratory organs of the following :—(1) crayfish, (2) mussel, (3) frog, and (4) a fish.

5. What do you understand by the following terms :—(1) invaginate gastrula, (2) endosperm, (3) mesonephros, (4) nematocyst, (5) prothallus, (6) notochord, (7) nauplius?

6. Compare the assimilation of food in the following forms :—(1) protococcus, (2) torula, (3) amœba.

7. Describe the brain and spinal cord of a frog and the structure of a spinal nerve.

REGIONAL AND APPLIED ANATOMY.

1. Describe the steps of the dissections necessary to expose two of the following parts :—

(*a*) The posterior surface of the descending colon.
(*b*) The femoral artery in Hunter's canal.
(*c*) The first part of the axillary artery.
(*d*) The lingual artery in the first and second parts of its course.

2. Describe the topographical anatomy of the lungs with relation to the chest wall.

3. Describe the cutaneous nervous supply of either (*a*) the buttock and thigh, or (*b*) the shoulder and upper arm.

4. Describe the collateral circulation after ligature of either the common carotid artery or of the external iliac artery.

5. Describe the relations of the second portion of the aortic arch.

GENERAL ANATOMY AND PHYSIOLOGY.

1. Give an account of the structure of a pulmonary alveolus. What are the changes occurring in the blood during its passage through the lungs?

2. What is occurring in the heart when the first sound is heard, and to what causes is the first sound probably due?

3. What are the functions of the branches of the vagus nerve?

4. A healthy man makes a meal of porridge and milk. What are the chemical changes which the constituents of this meal undergo during digestion?

5. Give an account of the imperfections of the dioptric apparatus of the human eye-ball.

6. Give the experimental evidence on which our knowledge of the functions of the spinal cord is based.

MATERIA MEDICA, MEDICAL BOTANY, AND ELEMENTARY THERAPEUTICS.

1. Define the following terms, and give two examples of each:— Antiperiodic, Anthelmintic, Cardiac Tonic, Oxytocic, Hydragogue, Mydriatic.

2. Describe the preparation and characters of *Nitrate of Silver*. State its dose, modes of administration, and actions.

3. Name the officinal preparations containing Mercury in the metallic state, and describe the various methods by which mercury may be administered so as to produce its constitutional action.

4. What is *Ergot*? State its botanical source, officinal preparations, doses, and actions.

5. Give the botanical characters of *Atropa Belladonna* as regards *root*, *leaves*, *flowers*, and *fruit*. Name the officinal parts, give the preparations of each, and their doses.

6. How is *Chloroform* prepared? Give its officinal preparations and their doses, and state in detail the precautions necessary for its safe administration as a general anæsthetic.

N.B.—Officinal names must be written without abbreviation.

THERAPEUTICS, DIETETICS AND HYGIENE.

First Paper.

Candidates are expected to answer the first two questions, and either the 3rd or the 4th.

1. Describe fully the actions of (*a*) Alcohol, (*b*) the Essential Aromatic Oils.

2. Give in detail, with illustrative prescriptions, the uses of (*a*) Mercury, (*b*) Digitalis, (*c*) Quinine.

3. Classify Climates, and illustrate their influence upon health and disease.

4. Describe the different kinds of Baths, and illustrate their uses.

Second Paper.

Candidates are expected to answer three (3) questions in each subdivision.

A.—1. What are the amounts of N and C respectively which are required per diem to compensate the system for loss? How may these requirements be met?

2. Discuss the dietary of Infancy.

3. Classify the common articles of Diet, according as they are easy of, moderately easy of, and difficult of digestion.

4. Discuss the influence which may be exerted upon animal foods by cooking.

B.—1. What are the duties of a Medical Officer of Health, as prescribed in the Orders of the Local Government Board, to Urban Sanitary Authorities?

2. How may the air of towns be vitiated, and the air of rooms be purified?

3. What are the rules for improving the healthiness of a Site?

4. Discuss the influence of Occupation upon Health.

PATHOLOGY.

1. State and illustrate the causes of hypertrophy.

2. Describe the process of caseation, its various terminations and its causes.

3. State the principal facts concerning the structure, appearance and life-history of bacilli.

4. Describe the morbid appearances found in typical cases of pyæmia.

5. Describe the macroscopic and microscopic changes in the several stages of croupous pneumonia.

6. Describe the appearance, structure and history of a scirrhous carcinoma of the mammary gland.

SURGERY.

1. Give the etiology, the constitutional symptoms, the possible results or terminations, and the treatment, of septic fever following a wound.

2. Describe the common form of simple fracture of the lower end of the radius, such as may be caused by a fall on the hand; mention the usual position of the broken ends of the bone and of the hand in these fractures, and describe minutely the treatment you would adopt.

3. If symptoms of apnœa were to arise while you were administering chloroform, what steps would you take to relieve the patient? Mention the various causes which sometimes produce apnœa during the inhalation of the drug.

4. What are the distinctive characters of a hard and of a soft chancre? How should each of these forms of disease be treated, locally and constitutionally? What are the probable sequelæ following the infection in either form?

5. What are the symptoms, and the treatment, of compression of the brain caused by extravasated blood? How would you be able to diagnose the above condition from a case of coma caused by alcoholic poisoning?

6. Describe an epithelioma of the lip, its usual mode of origin, progress, diagnostic symptoms, and the treatment you would recommend.

THEORY AND PRACTICE OF MEDICINE.

1. Describe the general symptoms, course, and terminations of Progressive Locomotor Ataxy.

2. Give a sketch of the ætiology, symptoms, course, and immediate results of a case of acute articular Rheumatism, with suitable treatment.

3. Describe the usual signs and symptoms of a case of Incipient Pulmonary Phthisis.

4. Describe a severe case of Chorea, with ætiology, probable course, and suitable treatment.

5. Diagnose Cancer from other diseases of the Liver.

6. By what signs and symptoms would you diagnose aneurism of the ascending part of the aortic arch?

FORENSIC MEDICINE.

1. What are the several modes of death by means of which new-born children are destroyed, and what are the appearances found in each instance?

2. What is adipocere, and what are the circumstances which favour its production?

3. A man is found dead apparently by a gunshot wound: How would you proceed to determine whether it is a case of suicide or murder?

4. What precautions are to be adopted in the exhumation of the body of a person supposed to have died from poison?

5. Detail the signs of death, and say which of these, in your opinion, is the most conclusive.

6. What appearances will you observe in a drowned body which has been taken out of the water after ten days' immersion, the temperature of the air having been, during that period, 75° of Fahrenheit?

7. What are the principal pathological changes observed in the brains of persons dying insane?

8. Enumerate and describe the symptoms and post-mortem appearances in cases of poisoning severally by Chloral, Carbolic Acid, and Cyanide of Potassium.

Hospital Intelligence.

ALFRED HOSPITAL.

The Committee has decided, on the report of the Medical Staff, that the former decision as to the admission of female students must be adhered to, and that neither the out-patient or any other department can be reserved solely for them. If they choose to enter, proper facilities will be given to them in carrying on their practical studies.

WOMEN'S HOSPITAL.

The new bye-laws as revised by a joint committee, were brought before the subscribers at a meeting on the 28th ult., and were adopted without further alteration. The honorary medical officers are still to be elected by the subscribers, the number being increased to eight, viz., four attached to the infirmary and four to the maternity department. The present medical officers are to continue in office till the term of those last elected has expired, so that all may retire at the same time. There is provision for the Lecturer on Obstetrics at the University, being appointed by the Committee to act as an extra medical officer in connection with the maternity department.

Vital Statistics.

The report of the Government Statist on the Vital Statistics of Melbourne and suburbs, for October 1887, shows that the births of 1059 children, viz., 538 boys, and 521 girls, were registered during the month.

The deaths registered numbered 507, viz., 257 of males, and 250 of females. To every 1000 of the population of the district, the proportion of births registered was 2·85, and of deaths 1·36.

Eighty-six deaths took place in public institutions. The number of children under one year who died was 119, the total number under five years being 181.

As compared with the previous month, deaths from specific, febrile, or zymotic diseases, increased from 34 to 56, but those from local diseases, decreased from 292 to 252. Under the zymotic head, deaths from measles (which complaint has assumed an epidemic form), rose from 4 to 19, and those from diarrhœal diseases from 7 to 15. On the other hand, deaths from diphtheria fell from 7 to 4, and those from typhoid fever from 7 to 5. Under the local head, deaths from heart affections fell from 47 to 28, and those from lung and throat complaints from 108 to 81. Ten deaths of child-bearing women occurred during the month, as against 8 in September. If these numbers be compared with the births registered during the same months, it will be found that 1 death of a mother took place to every 106 children born alive in the month under review, and 1 to every 163 such children in the previous month.

Correspondence.

MALTED FOOD IN INFANTILE DIARRHŒA.

To the Editor of the Australian Medical Journal.

Sir,—As the difficulty experienced in feeding children while suffering from irritative diarrhœa is always a very troublesome matter for us to cope with, I think it only my duty to add my testimony to a form of food that has answered very satisfactorily in my hands. Amongst several severe cases of diarrhœa in children was that of my own child, now four months old, who was passing very large lumps of casein, together with a quantity of green matter, and irritative diarrhœa had set up.

Some short time back my attention was drawn to a leader in the *Lancet* on infant feeding, where three measures for adapting the casein of cow's milk to the requirements of artificial feeding were suggested, viz., peptonisation, the addition of barley water to the milk, and the use of malt. There was also an article in the *Medical Press and Circular* on the subject of infant diet, where malted foods were strongly recommended. I therefore determined to try the effect of malt extract, mixed with milk and water, on my own child, the plan of working being simple in the extreme. To a pint of milk and water I added about half a teaspoonful of Kepler's Extract of Malt, and gave this to the child in the ordinary way, and within forty-eight hours the lumps of casein, together with the green matter in the motions, had disappeared, the child slept well, and the diarrhœa ceased entirely. I have tried this same treatment in similar cases since then, with the same results.

Has the Malt Extract any digestive action on the casein of milk?

I should very much like to hear what others say about this mixture, as doubtless many have tried it.

Yours truly,
Fred. J. Clendinnen, M.D.

To the Editor of the Australian Medical Journal.

Sir,—I beg to call attention to some statements in the leading article of the last number of the *Medical Journal*, which may be misunderstood. In a review of a Special Report on Typhoid Fever lately issued by the Central Board of Health, the following statement occurs in reference to the 42nd Section of the Public Health Amending Bill:—"The clause enjoining the notification of all cases accompanied with eruption is nothing less than absurd." In what does the absurdity consist? It is to be observed that the proposed enactment, making it compulsory on the owner or occupier of any house to report the occurrence of any disease with eruption or eruptive symptoms, is only to be enforced when small-pox has been officially declared to be present in the colony. In all fairness, this should be clearly stated when discussing this provision of the Bill. In the light of late experiences in these colonies, it surely cannot be said that such notification is unnecessary. Can anything better be suggested which will be efficient, and yet free from all possible objection? If so, let us have it. It is easier to find fault than to provide a faultless scheme.

Then, in dealing with the report in the appendix on an outbreak of typhoid fever in the Geelong Grammar School, we find the following sentence:—"The milk, suspected of containing the poison, was not shown to have spread the disease among the persons who certainly made use of it." There is some misapprehension here evidently, for there is no certainty whatever that Stokes's ordinary customers made use of the same sample of milk that was supposed to have poisoned the Grammar School supply. On the contrary, the report on the Geelong outbreak distinctly states that Stokes had no proper dairy for keeping milk, and that "if the milk was taken straight away without coming in contact with the jug used for the K—— family (where typhoid existed), there would be no contamination." The report further mentions a peculiar coincidence which is not referred to in the review, viz., that a family named R—— got their milk from Stokes; the milk was always scalded, nevertheless one of the family, a boy aged 12 years, was taken ill with typhoid fever on 1st May. It was found, however, that this boy was in the habit of taking home the family milk, and sometimes got a drink of milk from Mrs. Stokes, which was unscalded.

Another mistaken view is thus stated:—"Further, there was something like satisfactory evidence that this outside supply (Stokes's milk) was not taken to the school." Now, it so happens that there is no reliable evidence at all, but rather the reverse, that Stokes's milk was not taken to the Grammar School. Certainly, the bare statement of an interested party cannot be taken as "satisfactory evidence," more especially as it is quite possible that some of the suspected milk may have reached the school unwittingly. Is there infallibility amongst milk vendors?

Passing over other points that might be criticised in the review, I may mention in conclusion that the argument drawn from Dr. Carstairs's position in the case, does not now hold good. It was understood at the time of the inquiry, and mentioned in the Report, that that gentleman took a different view of the cause of the outbreak from what I did. Since then, however, he has given his views to his own Local Board in the following terms:—"In his report Dr. Shields fell into a slight error by saying, we differ as to the cause of the outbreak. That was a mistake, as I had no opportunity of investigating the outbreak in Geelong proper. We differ as to the contamination of the milk from Stokes's dairy by Stokes." That is, by Stokes himself, who had typhoid and was sent to the Geelong Hospital. But in the Report I mention that there were two possible sources of infection, viz., Stokes himself, and also the K—— family. Dr. Carstairs therefore says that it is in reference to the first that we differ.

I am, &c., A. Shields.

Local Subjects.

Public Vaccinators.—The following appointments have been made:—Balmoral—George Richard Lawrence, M.R.C.S.; Mount Egerton—Natale Sisca, M.D., *vice* W. S. Dobbin, M.B., resigned; East Melbourne—John Brett, M.R.C.S., *vice* John W. Springthorpe, M.D., resigned.

Dr. Brett has also been appointed as Superintendent of the Calf Lymph Depôt, at the Royal Park, at a salary of £300 per annum.

Health Officers.—The following appointments have been confirmed:—Shire of Colac—Max Wall, M.D., *vice* Thomas Foster, M.R.C.S., resigned; Borough of Smythesdale—James Bennett Hayes, L.R.C.P., *vice* Robert Stewart, L.R.C.P., deceased.

Walter Herbert Barker, M.R.C.S., has been appointed Junior Deputy Medical Superintendent, Hospitals for the Insane, from the 7th November 1887, for six months, on probation.

Dr. W. B. Rankin, of St. Kilda, met with a severe accident on the 1st inst., by being thrown from his buggy in Chapel Street. The injury was chiefly to the shoulder, and was of such a nature as to necessitate confinement to the house for a time.

The annual conversazione of the Royal Society of Victoria, was held at the Athenæum, on the 9th inst. The address by the President, Professor Kernot, was taken up with a sketch of some of the most important advances in science during the last fifty years. Professor W. Baldwin Spencer also gave an account of the *Megascolides Australis*, and exhibited a number of specimens of this giant work, besides a series of diagrams to illustrate its structural peculiarities. There were also numerous interesting exhibits in various departments of physical and natural science.

Central Board of Health.—At the meeting of the Board, on the 25th ult., it was decided, that although it would be unwise at the present time to have the proclamation concerning small-pox revoked, yet it should be allowed to remain in abeyance, no fresh case of the disease having been reported for more than fifteen days.

The President, in his report stated that there appeared to be little probability that the proposed Health Bill would be passed this Session. It was then stated unofficially by one of the members, that in all probability, the Chief Secretary would be induced to bring in a single clause bill, making the notification of contagious diseases compulsory on all medical practitioners.

At a meeting of the Board, held on the 9th inst., remark was made on the alleged inattention to duty of some Health Officers. The special cases in point were narrated in reports of the outbreak of diphtheria at Port Campbell, and in the Kerang district. Two deaths had taken place at Port Campbell, and three in the Kerang district, and it was stated that full inquiry has not been made, with the view to precautions being taken against the spread of the disease. It was resolved that representation on the subject should be made to the local boards concerned.

The President drew attention to the fact, that the Board had no power either to prohibit the landing in the Colony of Chinese affected with leprosy, or to remove to a sanatorium those resident in the Colony who were affected with the disease. He might also point out the necessity for the establishment of lock hospitals. A report on the subject was sent to the Government by the Board, about two years ago, but nothing had since been heard of the matter.

The circular respecting typhoid fever, prepared by the Board for public information, and with a view to stamping out the disease as far as possible, was finally revised, and ordered to be circulated and posted in the waiting-rooms of railway stations, and other places of public resort.

The Board decided to recommend the retention in the service of the Board of Mr. Le Capelain, Superintending Engineer, though he had reached the age of sixty years. In the opinion of the board, Mr. Le Capelain is underpaid, and it was determined to recommend that he should receive an increase of salary.

BIRTHS.

Davis.—On the 18th ult., at Mitchell-street, Benalla, the wife of S. Sydney Davis, of a daughter.

Ick.—On the 25th ult., at Dundas-place, Albert Park, the wife of the Rev. Thomas E. Ick, M.A., M.B., of a son.

Lindsay.—On the 16th ult., at Lisnacrieve, Creswick, the wife of Dr. Robert C. Lindsay, of a son.

Nicholson.—On the 25th ult., at Benalla, the wife of John Nicholson, M.D., M.R.C.S., England, of a son.

Springthorpe.—On the 6th inst., at Camelot, Collins-street east, the wife of J. W. Springthorpe, M.D., of a daughter.

MARRIAGES.

Bryant—Tidy.—On the 19th ult., at St. Luke's Church, Adelaide, South Australia, by the Rev. Archdeacon Farr, Henry William Bryant, Surgeon, of Williamstown, Victoria, to Evelyn Mary Tidy, of Croydon, Surrey, England.

Carney—Hart.—On the 8th inst., at the bride's residence, Edsall-street, Malvern, Ina Hart, eldest daughter of P. Hart, Malvern, to Dr. J. H. Carney, Kyabram.

Dyring—Willis.—On the 17th ult., at St. Peter's Church, by the Rev. Canon Handfield, Carl P. W. Dyring, M.A., M.B., B.S., Coburg, to Helen Maude Kate, only daughter of T. Willis, Esq., Melbourne.

Lane—Kelleher.—On the 15th ult., at St. Patrick's Cathedral, Melbourne, by the Rev. J. E. Stevens, Charles T. Lane, M.B., Ch. B., of Camberwell, to Minnie eldest daughter of J B. Kelleher, Jolimont.

Lang—Simson.—On the 23rd ult., at St. George's Church, Malvern, by the Rev. C. J. Godby, M.A., Dr. W. H. Lang, Corowa, to Agnes Elizabeth, youngest daughter of Henry Bruce Simson, Esq., Markinch, Scotland.

O'Flaherty—Jellie.—On the 15th ult., at St. Mary's, North Melbourne, by the Rev. Father Grant, Leonard Smith O'Flaherty, L.R.C.P. Ed., of Brompton, S.A., to Susannah, youngest daughter of Mr. J. Jellie, of North Melbourne.

DEATHS.

Crosland.—On the 22nd ult., at his late residence, Epsom Downs, Bridgewater-on-Loddon, in the 60th year of his age, George Crosland, M.D.

MacGregor.—At Elsfield, Cotham-road, Kew, on the 10th inst., John James MacGregor M.R.C.S. England, M.D. Edinburgh, late of Daylesford.

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